Massachusetts Perkins V State Plan

Strengthening Career and Technical Education for the 21st Century Act (Perkins V) Public Law 115-224
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U. S. Department of Education Office of Career, Technical, and Adult Education

Strengthening Career and Technical Education for the 21st Century Act
(Perkins V) State Plan

I. COVER PAGE

A. State Name: Massachusetts

B. Eligible Agency (State Board) submitting plan on behalf of the State:
   Massachusetts Board of Elementary and Secondary Education

C. State Agency delegated responsibilities by Eligible Agency under section 131(b) for the administration, operation, or supervision of activities of the State plan (if applicable):
   Massachusetts Department of Elementary and Secondary Education

D. Individual serving as the State Director for Career and Technical Education:
   1. Name: Cliff Chuang
   2. Official Position Title: Senior Associate Commissioner
   3. Agency: Massachusetts Department of Elementary and Secondary Education
   4. Telephone: 781-338-3222

E. Type of Perkins V State Plan Submission - FY 2019 (Check one):

   ☑ 1-Year Transition Plan (FY 2019 only) – if an eligible agency selects this option, it will then complete Items G and J
   X State Plan (FY 2019-23) – if an eligible agency selects this option, it will then complete items G, I, and J

1 Under section 3(18) the term eligible agency means a State board designated or created consistent with State law as the sole State agency responsible for the administration of career and technical education in the State or for the supervision of the administration of career and technical education in the State.
Type of Perkins V State Plan Submission - *Subsequent Years (Check one):*

[ ] State Plan (FY 2020-23) - *If an eligible agency selects this option, it will then complete Items H, I, and J*

[ ] State Plan Revisions (Please indicate year of submission: ) - *If an eligible agency selects this option, it will then complete Items H and J*

F. Submitting Perkins V State Plan as Part of a Workforce Innovation and Opportunities Act (WIOA) Combined State Plan – FY 2019 (Check one):

[ ] Yes

[ ] No

G. Submitting Perkins V State Plan as Part of a Workforce Innovation and Opportunities Act (WIOA) Combined State Plan – *Subsequent Years (Check one):*

[ ] Yes (*If yes, please indicate year of submission: ________*)

[ ] No

H. Governor’s Joint Signatory Authority of the Perkins V State Plan (*Fill in text box and then check one box below):*

I. Date that the State Plan was sent to the Governor for signature:  **February 27, 2020**

[ ] The Governor has provided a letter that he or she is jointly signing the State plan for submission to the Department.

[ ] The Governor has not provided a letter that he or she is jointly signing the State plan for submission to the Department.

J. By signing this document, the eligible entity, through its authorized representative, agrees:

1. To the assurances, certifications, and other forms enclosed in its State plan submission; and

2. Item F will only appear to the user in the Perkins V State Plan Portal in subsequent years (FY 2020-23).

3. Item H will only appear to the user in the Perkins V State Plan Portal in subsequent years (FY 2020-23).

4. Item I is required in FY 2019 only for States that choose to submit a full Perkins V State plan, covering FY 2019-23.
2. That, to the best of my knowledge and belief, all information and data included in this State plan submission are true and correct.

<table>
<thead>
<tr>
<th>Authorized Representative Identified in Item C Above (Printed Name)</th>
<th>Telephone:</th>
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<tbody>
<tr>
<td>Cliff Chuang, Senior Associate Commissioner</td>
<td>781-338-3222</td>
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<th>Signature of Authorized Representative</th>
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II. NARRATIVE DESCRIPTIONS

A. Plan Development and Consultation

1. Describe how the State plan was developed in consultation with the stakeholders and in accordance with the procedures in section 122(c)(2) of Perkins V. See Text Box 1 for the statutory requirements for State plan consultation under section 122(c)(1) of Perkins V.

DESE developed the Perkins V State Plan in consultation with stakeholders across the state, anchored by a Perkins/High Quality College and Career Pathways Stakeholder Group, comprised of academic and technical teachers, administrators, school counselors, eligible recipients, charter school authorizers and organizers consistent with Massachusetts law; parents/guardians and students; institutions of higher education; entities participating in activities described in Section IV of the Massachusetts Workforce Innovation and Opportunity Act State Plan; interested community members (including parents and community organizations); representatives of special populations; representatives of business and industry (including representatives of small business); and representatives of labor organizations. This group met on October 18, 2018; March 21, 2019; June 19, 2019; October 16, 2019, and February 26, 2020.

DESE consulted with the Massachusetts Commission on Indian Affairs, Massachusetts Board of Elementary and Secondary Education Advisory Councils, the Massachusetts School Counselors Association, Massachusetts Association of Teachers of Speakers of Other Languages. DESE also consulted with Massachusetts Executive Office of Education, the Governor, and the Governor’s staff.

2. Consistent with section 122(e)(1) of Perkins V, each eligible agency must develop the portion of the State plan relating to the amount and uses of any funds proposed to be reserved for adult career and technical education, postsecondary career and technical education, and secondary career and technical education after consultation with the State agencies identified in section 122(e)(1)(A)-(C) of the Act. If a State agency, other than the eligible agency, finds a portion of the final State plan objectionable, the eligible agency must provide a copy of such objections and a description of its response in the final plan submitted to the Secretary. (Section 122(e)(2) of Perkins V)

DESE consulted with the Massachusetts Association of Community Colleges and the Massachusetts Department of Higher Education. DESE is responsible for secondary education and adult education in Massachusetts. No objections were filed.

3. Describe opportunities for the public to comment in person and in writing on the State plan.  (Section 122(d)(14) of Perkins V)

DESE conducted public hearings on the Draft Massachusetts Perkins V Four-Year State Plan after appropriate and sufficient notice. The public hearings were conducted as follows:
- Essex North Shore Technical Agricultural High School, Hawthorn, MA on December 10, 2019 from 4:00 – 6:00 p.m.
- Smith Vocational Agricultural School in Northampton, MA on January 8, 2020 from 4:00 – 6:00 p.m.
- Greater New Bedford Vocational High School, New Bedford, MA on January 14, 2020 from 4:00 – 6:00 p.m.

Notification regarding the public hearings began on December 6, 2019, with an announcement in the Office for College, Career and Technical Education (CCTE) Newsletter that was emailed to eligible recipients; posted on the widely accessed DESE-Office for College, Career and Technical Education website under “CVTE News” at http://www.doe.mass.edu/cte/; and in a notice titled ‘Perkins V Opportunities for Public Comment’ in the Commissioner’s Weekly Update, a widely distributed newsletter from Commissioner Jeffrey C. Riley and the Massachusetts Department of Elementary and Secondary Education (and was repeated on January 11, 2020). This was also when a ‘Perkins V’ link was made available on the CVTE section of DESE’s website; the website featured an electronic option for submitting public comment in addition to various Perkins V-related resources. The announcements, which included a link to resources and public comment information, were emailed to individuals and organizations representing academic and technical teachers; administrators; school counselors; eligible recipients; charter school authorizers and organizers consistent with state law; parents and students; institutions of higher education; entities participating in activities described in the Workforce Investment Act Public Law 105-220; interested community members (including parents and community organizations); representatives of special populations (individuals with disabilities, individuals who are economically disadvantaged, individuals with limited English proficiency, individuals preparing for nontraditional fields, single parents, including single pregnant women, students whose parents are on active duty in the armed forces, youth who are in, or have aged out of the foster care system, homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act and out-of-workforce individuals); representatives of business and industry (including representatives of small business); and representatives of labor organizations in Massachusetts.

The summary of the feedback, requests and recommendations made at the public hearings and the DESE responses are included in last table at the end of this State Plan.

**B. Program Administration and Implementation**

1. **State’s Vision for Education and Workforce Development**
   
   a. **Provide a summary of State-supported workforce development activities (including education and training) in the State, including the degree to which the State's career and technical education programs and programs of study are aligned with and address the education and skill needs of the employers in the State identified by the State workforce development board.** (Section 122(d)(1) of Perkins V)
As Massachusetts transitions from the work of Perkins IV into Perkins V, it has become clear that Career and Technical Education (CTE) is an increasingly important option for Massachusetts students and their families, school district leaders, employers and workforce development partners. These stakeholders see the benefits of CTE as preparation for a wide range of options in the diverse Massachusetts labor market and as a positive secondary school experience for students, offering hands-on learning, industry experience, and a relevant curriculum linking academic and career-related subjects resulting in a strong correlation with positive academic outcomes and graduation rates.

During the Perkins IV program years, the Massachusetts Department of Elementary and Secondary Education (DESE) shaped and strengthened the array of CTE programs that local school districts can implement. Currently there are Vocational Technical Education (VTE) Frameworks for 44 vocational programs of study in 11 career clusters with updated processes for both program approval and review. In FY17, under the leadership of the Governor’s Workforce Skills Cabinet, the Commonwealth launched the High Quality College and Career Pathway (HQCCP) initiative to provide even more pathway options that include both Perkins-supported and state-funded programs of study. The goal of HQCCP is to significantly increase the number of and provide equitable access to traditionally underserved populations of students participating in high quality college and career pathways, including work-based learning and culminating in industry recognized credentials and/or postsecondary degrees aligned with labor market demand. Adoption of new pathway programming is driven and decided by local school districts with higher education and employer partners, and informed by Regional Labor Market Blueprints. The blueprints were developed through a collaboration among the 16 MassHire Workforce Boards, district leaders, institutions of higher education, as well as workforce and economic development partners.

HQCCP includes Perkins-supported Career/Vocational Technical Education (CVTE) programs, MGL Chapter 74-supported VTE programs and two new state-funded pathway options, called Innovation Pathways and Early College Programs. The two new pathways will benefit from many of the same approaches, program resources and professional networks as the CVTE programs. Districts can choose among these pathway options as they seek to expand their college and career-related program offerings. We expect strong cross-fertilization of ideas and approaches among the different types of pathways.

The expanded menu of options within the HQCCP initiative seeks to provide college and career-related education to a wide range of students throughout the state. This initiative was intentionally designed with a strong emphasis on equity and access. These pathway options will expand opportunities for students in rural, suburban and urban districts, students from a variety of economic backgrounds, educational interests and career goals, including economically disadvantaged students, and students from all of the identified Perkins special population groups. Through these initiatives, Massachusetts seeks to expand access to an array of engaging academic and career programs of study, and to provide access to strong and growing industries and occupations.

b. Describe the State's strategic vision and set of goals for preparing an educated and skilled workforce (including special populations) and for meeting the skilled workforce needs of employers, including in existing and emerging in-demand
industry sectors and occupations as identified by the State, and how the State's career and technical education programs will help to meet these goals. (Section 122(d)(2) of Perkins V)

Massachusetts has created a delivery for career development education and experiences under the umbrella of High Quality College Career Pathways (HQCCP), which includes Massachusetts vocational technical education programs under MA General Law Chapter 74, Innovation Pathways with a focus on sector occupations and Early College Designated Programs. This over-arching pathway delivery models provides options for school districts and community colleges to maximize equal access for all students at the secondary and postsecondary levels to participate in career education, technical education, and/or postsecondary early college programs. This provides multiple program options for institutions.

The strategic vision for Massachusetts includes:
(a) working with a network of stakeholders and industry experts to identify the education and skill needs of employers, (b) building these needs into the policies and procedures that are used for establishing Perkins programs and High Quality College and Career Programs, (c) collaborating with other DESE offices to provide optional supports for special populations in both gaining access to and succeeding in programs, (d) utilizing these resources to regularly refine current systems of monitoring programs, and (e) providing technical assistance and resources to secondary and postsecondary recipients that assist them in both meeting requirements and developing to become high quality.

The statewide network of workforce development boards, now called MassHire Boards, plays an active role in supporting secondary and postsecondary education. Most recently, the MassHire Boards worked in regional groups to develop Regional Blueprints outlining critical industries and occupations for each region, and strategies to align workforce and educational programs to build awareness, education and preparation for these industries. The Blueprints referenced throughout this State Plan provide guidance to shape adoption of C/VTE and the new career pathway programs in each region and district.

Massachusetts is amending the Vocational Technical Education Regulation to add a section to allow for the creation of “pilot” vocational technical education programs under MA General Law chapter 74. This will expand opportunities available to all students as the state collaborates with institutions and explores emerging, in-demand occupations that may lead to the establishment of new vocational technical education programs, for which MA does not have an existing Vocational Technical Education Framework. Additionally, the language contained in the “pilot” regulations will create a pathway leading to vocational teacher licensure to support future educators who transition from business and industry to becoming licensed vocational technical education teachers.

Those programs that receive state-approval, referred to as Chapter 74 programs, are each required to have a Program Advisory Committee (PAC). The role of the PAC is to provide feedback into the labor market needs and ensure programs are designed and implemented to meet the needs of the respective industry. Program Advisory Committee members are involved at the initial creation of a vocational technical education program to ensure the labor market need exists for the creation of the program, review equipment, technologies, software and curriculum aligned to MA Vocational Technical Education Frameworks. Program Advisory Committees continue to meet regularly throughout the year.
to continue program reviews. With an overarching theme of equity, Massachusetts requires specific composition and representation of program committee members, including representation of persons with disabilities, English language learners, nontraditional, post-secondary, parents, students and apprenticeship members, as appropriate. Massachusetts will continue to hold this standard in order to prioritize those programs that offer graduates optimal opportunities for employment and/or continued education.

Working with other DESE offices is foundational to developing and supporting high quality college and career pathways to school age and adult learners. Existing partnerships include Special Education Planning and Policy Development (SEPP), Adult and Community Learning Services (ACLS), Resource Allocation and Strategic Planning (RASP), the Office of Educator Licensure, and the Office of Language Acquisition (OLA). These collaborations are key to addressing the needs of special populations.

As an example, CCTE collaborates with Special Education Planning and Policy Development (SEPP) so that students in CCTE education are appropriately receiving secondary transition services, are appropriately connected to vocational rehabilitation services, and are educated in the least restrictive environment. Monthly combined meetings with SEPP and CCTE provide continuous support to recipients. Projects have included collaborating on grant opportunities, guides, and other resources for districts and community colleges. Under Perkins V, CCTE will continue collaborating with SEPP for providing guidance, resources, technical assistance and professional development to eligible recipients (LEAs); eligible entities (consortia of LEAs); and eligible institutions (postsecondary institutions).

Massachusetts monitors programs, including how programs prepare students for the workforce. Massachusetts envisions self-assessing and revising our monitoring practices by utilizing the resources mentioned in this section, including stakeholders and other DESE offices.

Massachusetts is committed to providing technical assistance and resources to secondary and postsecondary recipients that assist them in both meeting requirements to become high quality programs that graduates students with the knowledge and skills needed to seek employment, apprenticeship programs and/or postsecondary programs, which supply the necessary workforce to meet Massachusetts goals.

c. **Describe the State’s strategy for any joint planning, alignment, coordination, and leveraging of funds between the State's career and technical education programs and programs of study with the State's workforce development system, to achieve the strategic vision and goals described in section 122(d)(2) of Perkins V, including the core programs defined in section 3 of the Workforce Innovation and Opportunity Act (29 U.S.C. 3102) and the elements related to system alignment under section 102(b)(2)(B) of such Act (29 U.S.C. 3112(b)(2)(B)); and for programs carried out under this title with other Federal programs, which may include programs funded under the Elementary and Secondary Education Act of 1965 and the Higher Education Act of 1965. (Section 122(d)(3) of Perkins V)**
The Office for College, Career and Technical Education worked directly with the Executive Office of Education last year to support the Governor’s statewide initiative of creating postsecondary Advanced Manufacturing Programs, to meet the workforce demand in Massachusetts. Through joint planning and coordination with multiple state agencies, such as Economic Housing and Development, Department of Labor, MassHire, and postsecondary education partners’ funds were leveraged to support the creation of programs and programs of study.

Vocational technical education teachers worked in partnership with business and industry postsecondary professionals to re-design the Machine Tool Technology Framework upgraded to the Advanced Manufacturing Framework utilized at the secondary and postsecondary levels, which supports smooth transition and multiple entry and exit ramps for attaining stackable credentials.

d. Describe how the eligible agency will use State leadership funds made available under section 112(a)(2) of Perkins V for each of the purposes under section 124(a) of the Act. As outlined in Text Box 2 for the required uses of State leadership funds under section 124(a) of Perkins V. (Section 122(d)(7) of Perkins V)

The Massachusetts Department of Elementary and Secondary Education Office for College, Career and Technical Education will leverage State leadership funds to improve career and technical education across the Commonwealth in a variety of ways.

DESE is committed to preparing students for non-traditional fields in current and emerging professions, and to ensuring that all students, including special populations, are exposed to high-skill, high-wage, and in-demand occupations. DESE will retain an Equity Consultant or identify a staff member who provides a multitude of professional development and technical assistance throughout the state. The contract may include in-person professional development and follow-up technical assistance through phone, virtual, and onsite visits to districts and colleges to help them develop outreach and retention strategies to support students in occupations that are nontraditional by gender. On average, this individual conducts 8-12 professional development or technical assistance sessions with institutions per month. Statewide technical assistance and training includes workshops at the Massachusetts Vocational Association (MVA) Conference, the Annual Massachusetts Association of Vocational Administrators (MAVA) Connecting for Success Conference, Annual C/VTE Student Leadership Summit and at the Annual Massachusetts Girls in Trades Conference, State SkillsUSA competition, and at the MAVA Leadership Academies I and II, for current and prospective C/VTE administrators. These workshops address gender equity, gender identity and expression, and school climate.

In the coming year, DESE plans to expand the scope of services provided by the Equity Consultant and/or additional partners or DESE staff to provide professional development and technical assistance to sub-recipients throughout to state to include all special populations, with a particular focus on students with disabilities, English learners, students of color, and other students who do not currently have equitable access to career and technical education. In particular, DESE will support all institutions to provide support programs for special populations that lead to high-skill, high-wage, and
in-demand occupations, and will use collaborative data review protocols to support this work. Districts and colleges in Massachusetts allocate Perkins funds for the professional development of academic and technical educators, as well as counselors to better support special populations in the career areas, with special attention given to insuring access to information on high skill, high wage and in demand occupations. Review of core indicator data will allow targeted technical assistance to insure transition services and programs of study described for special populations are designed to facilitate the effective transition from secondary to postsecondary and high skill, high wage, and in demand occupations. In addition, CCTE regularly responds to district and college inquiries regarding access to and support in programs for special populations. Additionally, CCTE routinely communicates with a subsidiary group of the Massachusetts Association of Vocational Administrators called VASE-Vocational Administrators of Special Education to collaborate regarding specific needs.

The Department collaborates with the Massachusetts Department of Correction, Massachusetts Department of Youth Services, and County Sheriffs’ Offices to improve career/vocational technical education programming in correctional institutions. Programs offered to student-inmates in state institutions include: graphic design, culinary arts, computer operation, website development, construction-related fields, custodial technician, small engine repair, horticulture, Heating, Ventilation and Air Conditioning, welding, automotive technology, and green technologies. Institutions receive funding for twelve (12) programs that serve inmates in adult and youth facilities and male and female facilities. Some correctional institutions contract with regional vocational technical schools and colleges to provide instruction. All student-inmates participate in reintegration programs at their individual facilities. Career assessments, career development and employability skills are included in several programs with some inmates receiving assistance with general career and educational planning, and some receive assistance with remedial education and high school equivalency from funding sources other than Perkins. Desk reviews are conducted of all grantees.

The Office for College, Career and Technical Education recently designed and awarded a multi-year contract for the review and revision of Massachusetts 44 Vocational Technical Education Frameworks, currently organized into eleven career clusters, which drive state-approved vocational programs of study and operate in accordance with Massachusetts General Law Chapter 74. The vast majority of these programs are conducted at secondary schools that also receive Perkins funding; however, all programs of study are grades 9 – 14, which inherently support secondary to postsecondary linkages and robust programs of study. The programs of study are intentionally aligned to All Aspects of Industry and each of the six strands ensure students are equipped with 21st century skills, through the delivery of rigorous, relevant, and technologically challenging curricula. Professional development and technical assistance will also be provided to help schools implement the new frameworks.

Massachusetts recently created three new Chapter 74 Vocational Technical Frameworks:

1. Advanced Manufacturing Program
2. Aviation Maintenance Technology Program (development continues)
3. Chapter 74 Vocational Technical Exploratory Program (currently in public comment)
Massachusetts is currently revising twelve Chapter 74 vocational frameworks structured into 2 phases. Phase 1 consists of the following vocational frameworks:

Automotive Technology, Carpentry, Dental Assisting, Electrical Technology, Health Assisting, and Aviation Maintenance Technology (in development)

Phase 2 consists of the following vocational frameworks:

Collision Repair and Refinishing, Cosmetology, Design and Visual Communications, Graphic Communications, Heating, Ventilation, Air Conditioning and Refrigeration, Medical Assisting, and Plumbing

There is close collaboration with the Massachusetts Division of Professional Licensure state licensing boards to ensure the vocational curricula align to licensing board requirements, for those vocational programs that offer students accredited hours toward licenses.

During phase 1 and phase 2 of this project, vocational programs are identified for revision and scoping work based on various data, including Massachusetts workforce blueprints, high-skill, high-wage, in-demand occupations, and occupational outlook. Additional scoping activities are currently underway for the Carpentry, Cosmetology, Design and Visual Communication and Graphic Communications programs. For these programs specifically, we are considering more significant structural changes to the frameworks. For example, teams are analyzing a variety of data for feasibility of adding Barbering as a concentration within the Cosmetology Framework, or to become a newly created Chapter 74 vocational program. Similar work is occurring for the Carpentry and Cabinetmaking frameworks. With the transformation of the printing industry, we are considering the consolidation of the Graphic Communications framework into the Design and Visual Communications Framework, including considerations for Chapter 74 vocational teacher licensure.

All the strands in the vocational technical frameworks contain “Performance Examples,” to support embedded academics, applicable Industry Recognized Credentials at the state and national level, as appropriate, and third-party credentials. Integration is supported through embedded academics contained within each vocational program’s framework, which directly align to the Department’s current Academic Frameworks.

All revised and newly created vocational frameworks undergo a public comment period and extensive vetting by practitioners, the Massachusetts Division of Professional Licensure, as appropriate, Program Advisory Committees across the state, and business and industry professionals, to ensure students are equipped with 21st century skills through the delivery of rigorous, relevant, and technologically challenging curricula.

Currently, the newly established vocational frameworks include the Aviation Maintenance Technology Program, aligned to the Federal Aviation Administration (FAA 147), and the Chapter 74 Vocational Exploratory Program Framework. No prior framework existed for these programs, so Massachusetts created a new section within the Massachusetts Vocational Technical Education Regulation 603 CMR 4.0, (currently in public comment period), to design a structure to “pilot” new, non-existing technical programs in emerging technologies and fields. The revised vocational regulations also allow for the
development of new, non-existing Chapter 74 vocational technical teacher licenses. This newly added section within the vocational regulations will allow the Department to encourage and support secondary and postsecondary institutions to be innovative and explore new occupational areas, so Massachusetts may create new Chapter 74 vocational programs in emerging markets aligned to labor market needs.

The Machine Tool Technology Framework was revised and elevated to become the new Advanced Manufacturing Framework, with a focus on state-of-art technologies, credentials, equipment and facilities. All new and revised frameworks now include the identification of equipment required to deliver all strands in the framework and the identification of basic, essential and advanced skill standards, so the framework further supports rigorous secondary to postsecondary linked programs of study and ensure integrity of the vocational program.

Through the Vocational Framework Revision project, staff in CCTE will continue to work in close collaboration with the Contractor, the Executive Office of Education, the Executive Office of Labor and Workforce Development, and other stakeholders, as vocational frameworks are reviewed for restructuring and/or sun setting in response to labor market data and workforce trends. Massachusetts eleven clusters will also be reviewed for appropriate alignment and/or expansion based on new, emerging occupational industries.

Massachusetts has a long history of ensuring highly qualified career/vocational technical education teachers deliver rigorous technical programs of study. Massachusetts has two distinct licensure tracks, which provide for the preparation and attainment of academic licensure, including licensure for teachers in Perkins Career and Technical Education Programs under MGL Chapter 71 and a specific licensure route aligned to MGL Chapter 74 for Vocational Technical Education Teacher Licensure. Both licensure tracks require the completion of teacher tests. The Department has contracted with a vendor who creates and administers the MA Vocational Technical Teacher Test for Chapter 74 vocational licensure, which includes subject matter written, and performance tests. Test Development teams work in partnership with subject matter experts to align the vocational tests to the 44 vocational technical frameworks, with a keen eye on testing requirements and vetting.

The Department of Elementary and Secondary Education continues to utilize Perkins funds to support professional development academies administered in partnerships with school districts with Perkins career and technical education programs and Chapter 74 state-approved vocational technical education programs by supporting statewide vocational technical education leadership academies. There are two academies that provide high quality, intensive, and focused professional development for aspiring leaders in career/vocational technical education. The intended outcome of these academies is initial Chapter 74 Vocational Administrator licensure, in accordance with Massachusetts General Law Chapter 74, for academy participants, creating a leadership pipeline in career/vocational technical education.

Perkins Leadership Academy One is designed to lead to vocational administrative licensure for Vocational Supervisor-Director, Vocational Principal/Assistant Principal, or Cooperative Education Coordinator. Perkins Leadership Academy Two is designed to lead to MGL Chapter 74 vocational
licensure for Vocational Principal/Assistant Principal, or Vocational Superintendent/Assistant Superintendent.

Finally, DESE will also be using state leadership funds to expand access to career and technical education by supporting the expansion of our High Quality College and Career Pathways and After Dark initiatives. This innovative initiative is one vehicle Massachusetts has adopted to address the significant wait list of students, generally isolated to Gateway Cities, were vocational technical education programs are oversubscribed.

2. Implementing Career and Technical Education Programs and Programs of Study

   a. Describe the career and technical education programs or programs of study that will be supported, developed, or improved at the State level, including descriptions of the programs of study to be developed at the State level and made available for adoption by eligible recipients. (Section 122(d)(4)(A) of Perkins V)

As discussed above, the expanded menu of career education options within the HQCCP initiative seeks to provide college and career-related education to a broad range of students throughout Massachusetts. The HQCCP initiative was intentionally designed with a strong emphasis on equity and access. These pathway options will expand opportunities for students in rural, suburban and urban districts, students from a variety of economic backgrounds, educational interests and career goals, including economically disadvantaged students, and students from all of the identified Perkins special population groups. Through these initiatives, Massachusetts seeks to expand access to an array of engaging academic and career programs of study, and to provide access to strong and growing industries and occupations. Each of the HQCCP are discussed below.

Through the HQCCP initiative, Massachusetts has created a four-year College and Career-readiness Advising (CCA) Framework (with plans for expansion to the middle grades) for academic and career planning. The framework identifies three domains for development (personal/social, career development, and academic, college and career planning), learning objectives for each domain, activities and lessons for attaining those objectives, and the artifacts of learning that will be documented/stored in an online planning system through an E-portfolio, which becomes the student’s MyCAP.

MyCAP is not only the tool that captures the learning but it is also a student-directed process in which students discover their interests and passions, explore the labor market, identify careers, engage in work-based learning experiences and make the connection between what they do now with future plans. The implementation process is driven by the CCA framework whose design ensures student attainment of identified goals in each of the domains in each grade 9-12. Further, the framework guides students towards early identification of career interests, assists in course selections that are aligned with those interests leading to work-based learning experiences that will provide deeper learning and support career choices.
MyCAP captures the learning and experiences throughout the students’ high school career. The structured advising program should be a school-wide effort with responsibility for lessons and activities residing with many educators not just school counselors. MyCAP can become the required career plan for all students.

High Quality College and Career Pathways (HQCCP)

Vocational Technical Education (VTE) Programs:

Chapter 74 Career/Vocational Technical Education Programs:
Chapter 74 state-approved vocational technical education programs are the signature programs of the Massachusetts C/VTE system. These are programs that meet the definition of vocational technical education contained in Massachusetts General Law Chapter 74 and are approved by DESE pursuant to Chapter 74 and the Massachusetts’ Vocational Technical Education Regulations. Chapter 74 state-approved vocational technical education programs exceed the federal Perkins Act definition of career and technical education, as well as the state guidelines. The programs teach technical, academic and employability skills within 44 frameworks in 11 career clusters, based on occupations in-demand in Massachusetts. The eleven clusters include:

- **Agriculture and Natural Resources Cluster**, including programs such as Horticulture and Animal Science;
- **Arts and Communication Services Cluster**, including programs such as Design and Visual Communication;
- **Business and Consumer Services Cluster**, including programs such as Business Technology and Fashion Technology;
- **Construction Cluster**, including programs such as Carpentry and Plumbing;
- **Education Cluster**, including programs such as Early Education and Care;
- **Health Services Cluster**, including programs such as Dental Assisting and Medical Assisting;
- **Hospitality and Tourism Cluster**, including programs such as Culinary Arts and Hospitality Management;
- **Information Technology Services Cluster**, including programs such as Computer Programming and Web Development;
- **Legal and Protective Services Cluster**, including a Criminal Justice program;
- **Manufacturing, Engineering and Technology Cluster**, including programs such as Machine Tool Technology, Engineering Technology and Biotechnology;
- **Transportation Cluster**, including programs such as Automotive Technology and Marine Service Technology.

Each of the 44 vocational technical programs has an applicable state framework comprised of six strands, which directly align to All Aspects of Industry. The frameworks focus on state-of-art technical skills, academic integration, and all aspects of the industry defined by Massachusetts industry and educational professionals. These frameworks outline what students must know and be able to do in
the technical area covered by the program and provide general skills and competencies expected of students in the areas of safety and health; employability; management and entrepreneurship; and technology. State-approved programs must adhere to state regulations in addition to Perkins Act requirements.

As previously noted, the Office for College, Career and Technical Education recently designed and awarded a multi-year contract for the review and revision of Massachusetts 44 Vocational Technical Education Frameworks. The vast majority of these programs are conducted at secondary schools that also receive Perkins funding; however, all programs of study are grades 9 – 14, which inherently support secondary to postsecondary linkages and robust programs of study. The programs of study are intentionally aligned to All Aspects of Industry and each of the six strands ensure students are equipped with 21st century skills, through the delivery of rigorous, relevant, and technologically challenging curricula. Professional development and technical assistance will also be provided to help schools implement the new frameworks.

Through the Vocational Framework Revision project, staff in CCTE will continue to work in close collaboration with the Contractor, the Executive Office of Education, the Executive Office of Labor and Workforce Development, and other stakeholders, as vocational frameworks are reviewed for restructuring and/or sun setting in response to labor market data and workforce trends. Massachusetts’s eleven clusters will also be reviewed for appropriate alignment and/or expansion based on new, emerging occupational industries.

Staff from the Office of College, Career and Technical Education work closely with the Massachusetts School Building Authority (MSBA) and are involved in the review of proposed new buildings, including the vocational programs offered, shop layout and required equipment, to ensure the vocational technical frameworks can be implemented, and are fully accessible to ensure equal access for all students.

**Innovation Pathways:**
Innovation Pathways, a new career pathway structure launched through HQCCP in 2017, connect student learning to a broadly defined industry sector that is in demand in the regional and state economy, and guide students to relevant post-secondary education and training. Participation in this pathway contextualizes student learning, engages students in their high school experience, and can lead students to meaningful careers in the relevant industry sector upon completion of needed postsecondary education and training. These pathways emphasize the importance of work-based learning, and require internship or capstone experiences. Innovation Pathways focus on industry sectors such as Information Technology, Advanced Manufacturing, Business and Finance, Life and Environmental Science and Healthcare that are in high demand in MA based on current labor market information (LMI). DESE is in the process of aligning Perkins requirements with those of the Innovation Pathway designation.

**Early College Programs:**
Early College programs, characterized by close partnerships between high schools and institutions of higher education, are designed to blend elements of high school and college to provide students with opportunities to experience and complete college level academic coursework on a clearly articulated
pathway and simultaneously gain exposure to a variety of career opportunities. Participating students must have the opportunity to earn at least 12 college credits through dual enrollment while in high school. Early College programs also present an opportunity to reduce the time and expense of earning a college credential while increasing the likelihood of completion. Their importance in MA relates in part to the high demand in the MA labor market for employees with post-secondary credentials, especially two- and four-year degrees.

**Non-Chapter 74 Career and Technical Education (CTE) programs:**
Non-Chapter 74 career and technical education programs are programs that meet the federal Perkins Act definition of career and technical education but are not Chapter 74- approved vocational technical education programs. Currently, local school districts adopt these programs, selecting from 41 of the 44 CVTE frameworks. The exceptions are Plumbing, Cosmetology, and Electricity, which can only operate in Massachusetts as Chapter 74 state-approved vocational technical education programs. Under Perkins V, Massachusetts has created a formal program notification process for CTE Programs.

**Postsecondary Chapter 74 CVTE Programs:**
Postsecondary vocational technical education programs, which are programs offered at high schools with mainly Chapter 74 state-approved vocational technical education programs, take place during the day, after-school, evenings, and weekends, and are designed for adult learners. Postsecondary Chapter 74 state-approved vocational technical education programs must also meet all the requirements of MGL Chapter 74, like secondary state-approved Chapter 74 programs. Perkins career and technical education programs are mainly offered through the state community college system, although there are instances of Perkins CTE programs being offered in high schools with Chapter 74 state-approved postsecondary vocational technical education programs.

**Postsecondary CTE Programs:** DESE allots 30% of Perkins funding directly to 15 statewide postsecondary institutions, one city college, one postsecondary quasi-public/private technical school that receives state funding, and one postsecondary consortium to provide CTE programs to students who have completed high school and who are pursuing technical training in a 2-year college or other postsecondary environment. Some of these programs are advanced levels of training that students pursued in high school or provide students the opportunity to pursue a technical skill area they did not have access to or were not interested in acquiring while in high school. Courses must be 12 credits in order to be recorded as CTE programs. These programs are offered at 18 postsecondary institutions affiliated with the state to allow students to continue programs started in high school, retrain for new occupational areas later in life or to allow students from high schools who did not consider or have access to CTE programs to acquire occupational skills and earn a credential. These programs are often linked to secondary programs through formal articulation agreements with high schools in the area the institution serves, and students can complete parts of coursework or even take some coursework online in order to provide open-entry, open-exit access to CTE programs.
Collaborations with Correctional Programs

DESE offers a competitive Request for Proposal every year to provide quality CTE programs of study and services to individuals in correctional institutions. Responsive agencies apply for up to $30,000 per program and report on outcomes at the end of the project. These programs are often linked and strategically aligned (through DESE’s Adult and Community Learning Services office) to activities funded by the Workforce Innovation and Opportunity Act (WIOA) and other funding programs under Title I that support programs intended to provide adult education to individuals in these institutions as a way to prepare students to participate in the more academically advanced CTE programs that would lead to certification and occupational preparation for in demand fields.

Referenced throughout this Perkins V State Plan are some of the initiatives, techniques, tools and resources that are signatures of the Massachusetts system, which are used to plan, implement, strengthen and support career/vocational technical education programs of study.

DESE-Wide Strategies: Through ESSA, Massachusetts is taking next steps to strengthen college and career readiness outcomes for all students and expand the use of data and information to inform families, to shape school improvement, to close achievement gaps, and support educators. Career and technical programs benefit from these strategies, particularly those strategies that build linkages between secondary and postsecondary education and apprenticeships. Moreover, because so many students and families are interested in career technical education, under ESSA, the new performance indicators to be shared with the public include a measure of enrollment in career technical education.

Within the CCTE Office: Within DESE’s Office for College, Career, and Technical Education (CCTE), which oversees Perkins programs and the federal Vocational Guidelines – Methods of Administration (MOA) program, several signature efforts will be referenced throughout this State Plan. Enhancements to the program approval and review process focus on important elements of labor market demand, career awareness and employability skills for students, connections to work-based learning, program safety, open access, equity and inclusiveness, and accessibility for all. Guidance and supports for the local Program Advisory Committees (PACs) help to strengthen this important component of program planning and continuous improvement. A new project to review the value of industry-recognized credentials will engage PAC members and others in statewide planning and information sharing. CCTE oversees a major state system for the provision of work-based learning referred as Connecting Activities, described below, which leverages employer involvement in this body of work. Collaboration with other units within DESE focuses on career awareness, college and career planning, support for students from special populations, and other aspects of student experience in CTE programs. These and other projects are referenced throughout this State Plan.

DESE Interoffice Collaborations: Working with other DESE offices is foundational to developing and supporting high quality college and career pathways to school age and adult learners. Existing partnerships include Special Education Planning and Policy Development (SEPP), Adult and Community Learning Services (ACLS), Resources, Allocation and Strategic Planning (RASP), the Office of Educator Licensure, and the Office of English Language Acquisition and Academic Achievement (OELAAA) and Office of Planning and Research (OPR).
THROUGH STATEWIDE NETWORKS: As a mid-sized state, Massachusetts also has a strength in the development of statewide networks that support schools in implementing career/vocational technical education. Under Perkins V, we will continue to draw on these networks:

MAVA. The statewide Massachusetts Association of Vocational Administrators (MAVA) is a professional association of educational leaders who administer career/vocational technical education programs in Massachusetts schools. Their professional development work is supported with Perkins funding and is important to professional development for our statewide network of Chapter 74 licensed vocational teachers, staff, administrators and partners. Within Perkins V, we seek to expand professional development for educators and will draw on this network as a key partner.

Connecting Activities. The statewide Connecting Activities initiative develops links between employers and schools in support of work-based learning experiences and career development activities. Working with all types of schools, including academic, comprehensive and vocational schools, this initiative builds local, regional and statewide networks. Special areas of focus in recent years include connections with STEM employers, connections with the employers in industries identified in the regional Blueprints, development of a continuum of career awareness, career exploration and career immersion activities for all students, supported by employers and community partners, and support for career awareness in middle schools. See more on the Connecting Activities network below.

WIOA/Workforce Boards (MassHire Boards). The statewide network of workforce development boards, now called MassHire Boards, plays an active role in supporting secondary and postsecondary education. Most recently, the MassHire Boards worked in regional groups to develop Regional Blueprints outlining critical industries and occupations for each region, and strategies to align workforce and educational programs to build awareness, education and preparation for these industries. The Blueprints, referenced throughout this State Plan, provide guidance to shape adoption of C/VTE and the new career pathway programs in each region and district.

Through labor market profiles, it is evident that Massachusetts participates in a diverse economy, and therefore offers programs of study in a wide range of industry and occupational sectors. Healthcare, Education, Financial Services, Advanced Manufacturing, Tourism and STEM/Technology continue to be engines of growth for the state. While agriculture is a small sector in our state, there are interesting opportunities in areas of environmental technology, marine/maritime industries, and in specialized areas of animal science, agriculture and horticulture. The services sector is strong, with opportunities stemming from tourism and from our dynamic arts economy. Professional services such as marketing, business technology, engineering and design services are strong areas of growth, along with construction and transportation, stimulated by all these industries.

In summary, throughout this State Plan, there are references to our efforts to offer high quality programming and experiences to students that build career awareness, starting in middle school or earlier, leading on to career exploration and career immersion, and offering a strong array of programs of study that both engage students and meet labor market demands.
The Connecting Activities Network

Through our statewide School to Career Connecting Activities network and through the leadership, professional development and resources provided by the CCTE unit, Massachusetts school districts are supported in creating a continuum of career development experiences from middle school through postsecondary education. This continuum starts with Career Awareness activities in the earlier grades, leading to more in-depth Career Exploration activities and then to Career Immersion activities, which include enrollment in CVTE programs and pathways; internships, summer jobs and cooperative education experiences; capstone projects and other experiences that immerse students in the career fields that interest them.

The Career Development Education Guide and Glossary provide a recommended sequence of activities over six years. School districts have flexibility to create their own sequence of activities, based on local priorities. Regional-level leaders from the MassHire Workforce Boards, CVTE advisory committee members, and other school and district partners help to shape these activities by providing local and regional events such as Career Days, STEM Industry Awareness events, guest speaker series, industry field trips and other career development enrichment. The MyCAP (described in another section) provides structure to this series of events, helping schools to help students map out personal goals and desired career development experiences.

Internships, summer jobs, cooperative education experiences or other work-based learning experiences are typically structured with the Massachusetts Work-Based Learning Plan (WBLP) or with a similar cooperative education agreement. Modeled after Massachusetts’s Chapter 74 Vocational Cooperative Education program guidelines, the WBLP provides a job description and a set of skills/tasks associated with the work experience. The WBLP skills include six employability skills, which are lifelong skills common across all industries, plus three to five or more workplace specific skills, which can include broad transferable skills, industry-specific skills, or competencies from a specific Chapter 74 Vocational Technical Education framework. The WBLP includes a performance evaluation rubric based on these skills.

In the Massachusetts Career Ready Database, internship program coordinators track the career focus area of the work experiences, along with the type of career focus, specifying whether the career focus is based on the student’s career pathway, personal career interests, a regionally-targeted blueprint industry and/or a general work experience. Internship program coordinators also track WBLP skills if applicable, as well as whether a work experience is supported by a class, workshop series, career pathway experience or other classroom or workshop component.

In YouthWorks, a statewide programs that provides subsidized wages for a large number of summer jobs plus a smaller number of year-round jobs, the program requires skill gain goals for all programs, to ensure that work experiences supported by that program are high quality learning experiences. Youthworks participants may use the Work-Based Learning Plan and/or complete the Signal Success workshop curriculum along with a portfolio of activities, and/or complete other measures of skill attainment. The leadership provided by Connecting Activities and YouthWorks helps to set the tone for other, local summer jobs programs, creating a culture of high quality work experiences.

In Cooperative Education, students have structured experiences related to their vocational technical education program of study. The same resources that support other work-based learning experiences
are available, in addition to the DESE Guide to Chapter 74 Cooperative Education and related safety and program administration guidance. CVTE program advisory committee members provide additional support for these programs, helping to provide placements and to create high quality job description for these placements.

The proposal process for all of the initiatives described in this document (CVTE, IP, Early College, Connecting Activities) includes questions about equity in access to programming, with recognition that career awareness in the middle grades is an important component of equity and outreach, including accessibility for all.

As described above, the recommended scope and sequence of career development activities begins in the middle school grades. School districts are increasingly eager to start career awareness activities in the middle grades, building a foundation for high school and beyond.

The statewide School to Career Connecting Activities network provides support for middle school programming through a variety of career days, STEM awareness events, field trips to CVTE programs, local colleges and local businesses and other career awareness events. This network is often involved with facilitating field trips or information days for middle school students to learn about CVTE programs available in regional or local high schools.

b. Describe the process and criteria to be used for approving locally developed programs of study or career pathways including how such programs address State workforce development and education needs and the criteria to assess the extent to which the local application under section 132s will—

i. promote continuous improvement in academic achievement and technical skill attainment;

DESE approves new vocational technical education (VTE) programs of study through a Chapter 74 (Massachusetts General Laws) application process. Program approval criteria are identified in the Massachusetts VTE Regulations 603 CMR 4.00. Applicants are required to consult with their local MassHire Workforce Board and other regional stakeholders; provide an analysis of labor demand and supply, as well as student demand; demonstrate preparedness to meet criteria outlined in state law and regulation; and demonstrate the ability to meet the federal definition of a Perkins CTE program. All Chapter 74 state-approved VTE programs are eligible to apply for and receive federal vocational funding (“Perkins funding”). All new programs must also comply with the federal Vocational Guidelines Methods of Administration (MOA) requirements.

DESE also approves other CTE programs of study for Perkins funding eligibility (called “Non-Chapter 74 programs”). These programs will provide notification, are reviewed through the Strengthening Career and Technical Education for the 21st Century Act (Perkins V) Local Application Process that includes the Comprehensive Local Needs Assessment (CLNA) process that requires the identification of workforce needs, and grant approval. Programs must demonstrate the ability to meet the federal

Based on the context of this requirement, the reference to the local application process under “section 132” appears to be a typographical error in the Perkins V statute. The correct section for local applications in Perkins V is section 134. Therefore, eligible agencies should respond to this item using the provisions in section 134 of Perkins V.
definition of a Perkins CTE program of study and must comply with the federal Vocational Guidelines Methods of Administration (MOA) requirements.

As part of the Chapter 74 program approval process, applicants develop curriculum maps outlining the curriculum for the proposed program, demonstrating alignment to the applicable state vocational technical framework, including the overall program of study of technical and academic courses, and initial course outlines for each of the technical courses. As part of program approval, applicants also identify instructional techniques, including integration of academic and technical learning and use of competency-based, hands-on applied instruction. Applicants identify opportunities for students to earn industry-recognized credentials and college credits and identify articulation agreements with postsecondary education and apprenticeship programs, and opportunities for work-based learning during the program. The program approval process also requires that applicants form program advisory committees (PACs) with representatives of industry, apprenticeships, higher education and community members, bringing knowledgeable partners into the program planning and continuous improvement of the program. The initial planning required by the program approval process builds a foundation for continuous improvement in supporting students in academic achievement and technical skill attainment.

DESE also approves Innovation Pathway (IP) programs through a comprehensive two-stage application process. IP applicants start by selecting a broad industry sector that will define the pathway and are then required to develop an integrated program that offers students deep exposure to that sector. The approval process requires the applicant to incorporate key elements into the pathway that include: at least two technical courses and two college level courses; student-centered college and career planning; exposure to targeted pathway opportunities intended to lead to careers; a 100-hour internship or capstone in the industry with related quality indicators; and a partnership with at least one employer, employer association or MassHire Workforce Board. IP state-approved programs that receive formal designation and that also structure the program to meet all Perkins CTE requirements, as “Non-Chapter 74 programs” are eligible to apply for and receive federal Perkins funding and will be added to the Methods of Administration (MOA) Program universe.

Early College programs are approved through an Early College Joint Committee. In order to receive formal designation as a Massachusetts Early College program, applicants must demonstrate, with evidence, a capability to effectively implement program elements that adhere to five of the guiding principles with a particularly strong emphasis on equitable access to the program for those who need it most, including homeless, foster care and military connected students. Implicit within this framework are the tactical components of a Massachusetts high quality career pathway more broadly: advising, work-based learning, postsecondary linkages, integrated instruction, credential attainment, and alignment with labor market data. Applicants will note that these components are embedded within the implementation of the five guiding principles.

In order to report students as enrolled in Strengthening Career and Technical Education for the 21st Century Act (Perkins V) CTE programs in the Massachusetts Student Information Management System (SIMS), and in order to expend funds for specific programs, school districts must first designate programs as Perkins V CTE Programs and attest that they meet the definition of a Perkins V
program. This is done biennially, in conjunction with development of a Comprehensive Local Needs Assessment, through submission of a data form to the Department.

The form will ask the school district to:

- Identify itself by name and Local Education Agency (LEA) code
- Identify by name and 4- or 6-digit CIP code each of the programs offered via a series of pulldown menus
- Indicate the school where the program is offered by name and school code
- Attest that all programs meet the definition of a Perkins V program as articulated by the Strengthening Career and Technical Education for the 21st Century Act and by DESE guidance documents.

Data from this form will be shared with DESE’s Office of Education Data Services (EDS) in order to ensure that students are reported only for those programs first designated by the school district, and with DESE’s Office of Resource Allocation Strategy and Planning (RASP) to ensure that school districts allocate and expend Perkins V funds only for designated programs.

ii expand access to career and technical education for special populations;

In alignment with Perkins V, designated Innovation Pathways (IP) and Early College (EC) programs minimize barriers to student participation. They focus recruitment on special populations, including individuals with disabilities, economically disadvantaged/low-income youth, English Learners, as well as any students who may be first generation college-goers. Understanding students’ needs, these programs provide tailored academic and non-academic supports, including counseling/advising, tutoring, and wraparound services, to ensure that students will be able to participate and succeed in the programs. While DESE has not prescribed recruitment thresholds, DESE expects the enrollment in a designated program to mirror that of the school hosting the program. Programs that do not reflect proportionality will be subject to corrective action.

For Chapter 74 programs, the program approval process has several requirements that promote program design that welcomes and supports students from special populations and provides equal access to all programs and to all students.

DESE has designed a Comprehensive Local Needs Assessment process for Perkins V, with continued focus on equity and access for special populations.

Requirements already built into the Chapter 74 program approval process include:

- A description and documentation of strategies for ensuring broad representation on the Program Advisory Committee (PAC), including individuals from diverse racial, ethnic and linguistic groups, individuals with disabilities or individuals who can represent the interests of students with disabilities, and industry professionals who are in a field non-traditional for their gender;
- A description and documentation of data collection and data analysis strategies for examining program data for any issues of disproportionality; and
- A description and documentation of strategies and tools for reviewing curricula for bias or stereotyping;
• Alignment to the federal *Vocational Guidelines* - MA Methods of Administration Program (MOA)

In addition to these requirements, the program approval process includes an approved CVTE admission policy, recruitment practices, the design of an exploratory program (if applicable), and the design of program-specific career guidance and placement services. Each of these is important to ensuring equity and access to CVTE programs for all students, including special populations.

Through Perkins V and the new Local Needs Assessment process, DESE will provide school districts and/or post-secondary institutions that provide CTE programs with additional tools, technical support and professional development to expand access to career and technical education for special populations. DESE will provide support for local eligible recipients to understand the changes to the category of special population groups included in Perkins V, including:

(A) individuals with disabilities; (B) individuals from economically disadvantaged families, including low income youth and adults; (C) individuals preparing for nontraditional fields; (D) single parents, including single pregnant women; *(E) out-of-workforce individuals* (postsecondary and postgraduate only); (F) English learners; (G) homeless individuals described in section 725 of the McKinney-Vento Homeless Assistance Act (42 U.S.C. 11434a); (H) youth who are in, or have aged out of, the foster care system; and (I) youth with a parent who— (i) is a member of the armed forces (as such term is defined in section 101(a)(4) of title 10, United States Code (ii) is on active duty (as such term is defined in section 101(d) (1) of such title.

DESE is also currently in a comprehensive stakeholder engagement process to review the current process for admissions into the Chapter 74 programs and schools and will be proceeding with changes to regulations and policies to ensure that all special populations have equitable access to CVTE opportunities.

**iii. support the inclusion of employability skills in programs of study and career pathways. (Section 122(d)(4)(B) of Perkins V**

Employability skills are a key part of the CTE curriculum in Massachusetts, built into the requirements of the design of C/VTE and IP programs, and built into the *program approval process* through the curriculum design process and through the development of program advisory committees.

Career Development Education (CDE) is integral to High Quality College and Career Pathways, with career awareness, exploration and/or immersion activities included in the program across the four years of high school, and specific career and college counseling, including the guided use of individualized learning plans beginning in 9th grade. Students in Innovation Pathways have the opportunity to complete a 100-hour career immersion experience in either an internship or capstone class, offering structured work readiness activities; these experiences are designed to measure competency in employability and relevant technical skills in applied settings. In some instances, IP programs offer industry recognized credentials; however, at present this has not been demanded.
Employability Skills in the VTE Curriculum Frameworks: Employability skills are embedded in student learning, both through curriculum and instruction, and through experiential learning via cooperative education, internships, clinical experiences or other immersive experiences. Massachusetts has developed a specific strand of the VTE Curriculum Frameworks, Strand 4: Employability and Career Readiness Skills, because these are relevant across all programs of study. That strand is incorporated within each of the state’s 44 VTE Frameworks. Student mastery of employability skills is a central focus of the state’s Work-Based Learning Plan, currently in wide use across the state in CVTE and other programs.

Through the program approval process, applicants outline elements of their curriculum that integrate employability skills into student experiences through their classroom and work-based learning experiences.

Program Advisory (PAC) Committee Manual: An additional resource is the MA Program Advisory Committee Manual, a tool to guide schools and community colleges in the development of advisory committees for CTE programs. The primary role of a PAC is to guide the program development and design and stay current with industry standards. PAC(s) serve as liaisons to the industry, often becoming work-based learning employers. They provide valuable input into program curricula as well as facilities and equipment necessary for programs to remain current. PAC members also present directly to students either in the classroom or in their workplace, offering students unique, first-hand insight on pathways to employability and career readiness.

Through the program approval process, applicants outline their PAC(s) and describe the role that members will play in supporting the integration of employability skills into student experiences.

c. Describe how the eligible agency will—
  i. make information on approved programs of study and career pathways (including career exploration, work-based learning opportunities, early college high schools, and dual or concurrent enrollment program opportunities) and guidance and advisement resources, available to students (and parents, as appropriate), representatives of secondary and postsecondary education, and special populations, and to the extent practicable, provide that information and those resources in a language students, parents, and educators can understand;

Program Information through College and Career Advising in Middle and High School: Several initiatives in Massachusetts support college and career advising throughout middle and high schools. DESE has developed a College and Career Advising Framework (CCA) to guide schools in developing a scope and sequence for college and career advising, identifying skills, knowledge and experience that are recommended for 9th through 12th grades, with plans to extend this to middle school grades. Over six years from middle school through high school, students should have opportunities to identify their personal and career interests, and with their parents/guardians, learn about available pathways and programs of study that they can pursue in high school and college. The six-year college and career planning process is organized and driven through MyCAP (My Career and Academic Plan), which is
both a process and a tool to help students make more informed choices about their futures. This new process and tool is designed to emphasize personalization and student ownership.

During the 2018-19 school year, DESE introduced a new three-day workshop series and offered it to all high schools in the state. Workshops introduce the CCA Framework and MyCAP, explore data tools for college and career advising, outline a grade-by-grade scope and sequence for college and career advising, and help district staff plan, evaluate and sustain their college and career advising programs. The Framework emphasizes student awareness of pathway programs, as well as student participation in career development education, among other core subject matters.

**Online College and Career Advising Platforms:** Massachusetts schools and career centers can use electronic platforms to help youth and adults explore their interests, find out about opportunities, and track their career development activities year to year. The state’s new CCA Framework emphasizes the importance of use of an on-line platform for MyCAP, and such platforms are required for the new Early College and Innovation Pathway programs. The cost-free MEFA Pathways online platform was developed and customized for Massachusetts students, providing a variety of college and career planning tools. MEFA Pathways has platforms for middle school and high school and is a recommended platform for the MyCAP process. The cost-free MassHireCIS platform, similarly, provides career exploration tools, including assessments, occupational profiles and links to postsecondary programs of study. MassHireCIS also has a middle school component, high school and adult components, and is available to schools, One-Stop Career Centers and to the public at no cost.

**Secondary Transition Planning and Services**
Students with IEPs and their families also learn about approved programs of study and career pathways through the special education Secondary Transition process, a coordinated set of activities to facilitate the student’s movement from school to post-school activities, including postsecondary education, vocational education, integrated employment, continuing and adult education, adult services, independent living, or community participation. DESE promotes the integration of Secondary Transition planning and services with schools’ general education and guidance systems and structures, including CVTE.

**Middle and High School Career Fairs:** In many regions, there are middle and high school career days, organized by the Connecting Activities initiative or by other partners, allowing middle school students to learn about the regional labor market and to learn about programs of study and career pathways available to them.

**ACLS and MassHire Career Centers:** Adults seeking vocational programs can access information through adult education programs and through the network of MassHire Career Centers. MassHire Career Centers comply with WIOA sec. 188 and applicable provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) regarding the physical and programmatic accessibility of facilities, programs and services, technology, and materials for individuals with disabilities, including providing staff training and support for addressing the needs of individuals with disabilities.
Information in Multiple Languages: DESE makes information available both through the agency and through ensuring schools and colleges provide information in languages that students and parents/guardians can understand. At the department level, DESE has a Language Access Plan that includes resources and protocols for the translation of DESE documents as well as telephonic interpretation services.

Through the LOOK Act and 2018 changes in regulation, Massachusetts requires, starting on July 1, 2021, that CTE teachers who are assigned to provide sheltered English instruction to an English Learner either hold a Sheltered English Immersion (SEI) Teacher Endorsement or earn such endorsement within one year from the date of the assignment. In 2018, DESE identified a cohort of teachers for a cost-free SEI endorsement course. Through professional development and program monitoring, including the federal Vocational Guidelines civil rights reviews conducted through the Methods of Administration (MOA) Program, CCTE supports schools and community colleges in providing information on CTE programs and activities in languages of the communities served and of students enrolled in CTE programs.

Massachusetts closely monitors all recipients, ensuring information concerning career/vocational technical education programs is provided to students and to their parents/guardians. Information must include admission requirements for career/vocational technical programs; specific programs/courses that are available; employment and/or further education and registered apprenticeship opportunities. This information must be provided in the languages of the community served, including low-incidence languages. Further, all districts have been notified and routinely monitored to ensure policies covering class scheduling, tardiness, absenteeism, flexible school hours, credit-for-work programs, vocational education, MCAS remediation, and course credit must be updated to eliminate barriers to homeless youth participating and succeeding in school.

DESE is also currently in a comprehensive stakeholder engagement process to review the current process for ensuring that information is made transparently available to all middle school families seeking CVTE options in high school and will be proceeding with changes to regulation and policies to ensure that all special populations have equitable access to CVTE opportunities.

ii. facilitate collaboration among eligible recipients in the development and coordination of career and technical education programs and programs of study and career pathways that include multiple entry and exit points;

As discussed in a prior section, the Office for College, Career and Technical Education recently designed and awarded a multi-year contract for the review and revision of Massachusetts’s 44 Vocational Technical Education Frameworks that drive state-approved vocational programs of study and operate in accordance with Massachusetts General Law Chapter 74. Although the majority of these programs are conducted at secondary schools that also receive Perkins funding; all programs of study are grades 9 – 14, which inherently support linkages and career pathways that include multiple entry and exit points.
The programs of study are intentionally aligned to All Aspects of Industry and each of the six strands ensure students are equipped with 21st century skills, through the delivery of rigorous, relevant, and technologically challenging curricula which support Industry Recognized Credentials at the state and national level, as appropriate, and third party credentials. Some credentials are stackable and allow students multiple options for attaining credentials, particularly postsecondary students who complete a credential and exit, and then may return for additional training to earn more credentials.

As discussed above, since all of Massachusetts Chapter 74 VTE frameworks offer instruction for grades 9-14, and allow multiple entry and exit options, particularly at the postgraduate and postsecondary levels, this supports the Governor’s initiative to fill the skills gap and outreach to underserved and diverse populations, including adult retraining initiatives in collaboration with MassHire Boards, all aligned to the Massachusetts Regional Blueprints (referenced throughout this State Plan).

**Massachusetts Connecting Activities provides recipients with career pathways that include multiple entry and exit points, as described below:**

Connecting Activities (CA) is a Department of Elementary and Secondary Education initiative that facilitates collaboration among eligible recipients in the development and coordination of career and technical education programs and programs of study and career pathways that include multiple entry and exit points.

- CA leverages a statewide infrastructure to support college and career readiness for all students.
- CA establishes public-private partnerships through the 16 local MassHire Workforce Boards to connect schools and businesses. The initiative provides structured work-based learning experiences for students that support both their academic and employability skill attainment.
- Connecting Activities programming is designed to enhance, complement and support other programming in the school and community, so that youth can experience a range of opportunities as they develop college and career readiness throughout their high school years. Internships assist students in making more informed decisions about the education they need to be successful in a variety of career paths, including college, technical training, apprenticeships, and more.

iii. use State, regional, or local labor market data to determine alignment of eligible recipients' programs of study to the needs of the State, regional, or local economy, including in-demand industry sectors and occupations identified by the State board, and to align career and technical education with such needs, as appropriate

As part of the Massachusetts Regional Workforce Skills Planning Initiative, state and regional data packages have been generated with information on the local labor market in seven regions across the Commonwealth. The regional planning data packages have been developed in order to build a better collective understanding of current and projected labor market needs, in particular in priority industry sectors and occupations, and enhance the alignment and market responsiveness of local workforce, education and economic development systems. The updated decks are available to confirm regional
priority industries and occupations, as well as evaluate any new demographic, labor pool and talent pipeline considerations impacting workforce skills gaps in the region. In turn, these insights can inform policy-making and investments targeted at strengthening the Massachusetts economy.

Data packages include a Demand Star Ranking, which is a ranking of highest-demand, highest-wage jobs in Massachusetts, based on short-term employment projections (2020), long-term employment projections (2026), 12-month job postings from Burning Glass, and median regional occupation wages. The ranking is developed by State of Louisiana’s workforce system and implemented with support of Boston Federal Reserve. Noted in the resources are 4- and 5-star occupations requiring a postsecondary non-degree award, some college, or an Associate’s degree; bolded occupations appear across multiple priority industries.

State-approved vocational technical education programs directly align to the labor market needs of business and industry needs of the state, regions and local communities through the use of these and other workforce planning resources. Each vocational technical education program has a Program Advisory Committee comprised of business and industry, apprenticeship as appropriate, postsecondary representation amongst other inclusive required composition, who regularly review curriculum frameworks to ensure equipment, facilities and programs of study align to industry standards, and the workforce needs of the Commonwealth, identified in the Regional Workforce Blueprints.

Innovation Pathways are designed to give students coursework and experience in a specific high-demand industry, such as information technology, engineering, healthcare, life sciences and advanced manufacturing. Innovation Pathways are designed to create strong partnerships with employers in order to expose students to career options and help them develop knowledge and skills related to their chosen field of study before they graduate high school.

iv. ensure equal access to approved career and technical education programs of study and activities assisted under this Act for special populations;

DESE ensures equal access to approved career and technical education programs of study and activities through the following:

- Overall awareness strategies – sharing a vision for equity across all aspects of CTE programming. This vision includes a statewide look at developing an array of HQCCP programs to reach a diverse range of Massachusetts students, as well as a vision for equity within local admissions policies, bias-free curriculum design, equity in implementation of work-based learning experiences and career development experiences, and all other aspects of programming;
- Data analysis and monitoring strategies;
- Equity strategies embedded in the Program Approval process (as described in an earlier section) and in the Tiered-Focused Monitoring process, and federal Vocational Guidelines - Methods of Administration (MOA) program reviews
- Professional development and technical assistance strategies, including equal access admissions policy conversations; and;
• Building awareness of federal and state laws and regulations.
• As noted above, DESE is engaged in a comprehensive process to examine and modify regulations, policy and practices to ensure equitable access to CVTE programming for all special populations.

Federal and State Law and Regulation

Commitment to equity and our work building awareness is based on standards set in federal and state law and regulation including the following:

• INDIVIDUALS WITH DISABILITIES EDUCATION ACT (IDEA): Part B: Entitlement and Discretionary Preschool and School-Age Programs
• CARL D. PERKINS CAREER AND TECHNICAL EDUCATION IMPROVEMENT ACT OF 2006 P.L. 109-270 (PERKINS IV)
• Section 504 of the Rehabilitation Act of 1973
• Americans with Disabilities Act of 1990
• GUIDELINES FOR ELIMINATING DISCRIMINATION AND DENIAL OF SERVICES on the Basis of RACE, COLOR, NATIONAL ORIGIN, SEX, AND HANDICAP IN VOCATIONAL EDUCATION PROGRAMS - 34 C.F.R. Part 100, App. B
  o Massachusetts Methods of Administration (MOA) Program, aligned to the newly released Memorandum of Procedures, including the approved Targeting Plan.
• SELECTED STATE LAWS AND REGULATIONS
  o Education of English Learners: 603 CMR 14.00
  o Student Learning Time: 603 CMR 27.00
• Every Student Succeeds Act (ESSA)
• McKinney-Vento Homeless Assistance Act

Examples of tools and resources that support this work include:

Comprehensive Local Needs Assessment (CLNA): CCTE will include examination of equitable access through the state developed Comprehensive Local Needs Assessment. As noted above, the program approval process currently includes several strategies for ensuring equity and access for special populations including students experiencing homelessness.

CVTE Program Monitoring: CCTE conducts CTE program reviews and monitoring in a six-year cycle for all schools with C/VTE programs. A risk assessment results in tiered assignments for each school district, and the review process as well as technical assistance vary by tier. CCTE reviews data for potential disproportionality to inform professional development and uses disaggregated CTE enrollment data to engage Perkins recipients in discussions on both gaps in achievement and in program access, further evidencing the inter-related relationship between
Perkins and the federal Vocation Guidelines MOA Program.

**The federal Vocational Educational Guidelines for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex and Handicap:** By agreement with the United States Department of Education Office for Civil Rights, DESE is responsible for reviewing school districts, charter school, the collaborative, and postsecondary institutions, for compliance with the federal *Vocational Education Guidelines* for Eliminating Discrimination and Denial of Services on the Basis of Race, Color, National Origin, Sex and Handicap in Vocational Education Programs. ESE moved the MOA Program to the former Office for Career/Vocational Technical Education (now within the Office for College, Career and Technical Education), more than a decade ago, under the directive of USED Office for Civil Rights. This move allowed Massachusetts to synchronize the MOA Program with Perkins career and technical education programs, and Massachusetts state-approved vocational technical education program. ESE will continue efforts for all students to have equitable access to high quality career/vocational technical education programs and services. ESE will ensure the Massachusetts MOA plan aligns to the February 6, 2020 USED Memorandum of Procedures.

**Admissions Policies and Recruitment Strategies:** CCTE has prioritized increased focus on the oversight and monitoring of admissions to career and technical education programs. Examination of recruitment materials and activities available to applicants, along with review of the program placement processes and admissions tools will be monitored to promote equal access to career and technical information, including for individuals with disabilities and English learners and other students traditionally underserved in Massachusetts CTE programs. DESE will review all complaints filed by parents/guardians, applicants and others concerning admissions in order to resolve issues. Eligible recipients are provided with technical assistance and professional development in addressing issues.

**Professional Development and Technical Assistance in Support of Secondary Transition Services for Students with Disabilities:** Working in collaboration with other DESE offices, CCTE provides both technical assistance and professional development targeted to special populations. CCTE collaborates with Special Education Planning and Policy Development (SEPP) so that students in CCTE education are appropriately receiving secondary transition services, are appropriately connected to vocational rehabilitation services, and are educated in the least restrictive environment. Monthly combined meetings with SEPP and CCTE provide continuous support to recipients. Projects have included collaborating on grant opportunities, guides, and other resources for districts and community colleges. Under Perkins V, CCTE will continue collaborating with SEPP for providing guidance, resources, technical assistance and professional development to eligible recipients (LEAs); eligible entities (consortia of LEAs); and eligible institutions (postsecondary institutions).

**Students Educated in Institutional Settings:** CCTE will collaborate with the Office of Students Educated in Institutional Settings (SEIS) to provide technical assistance for CTE programming and provide access to CTE programming to students.
Civil Rights Awareness Integrated into all Professional Development: CCTE will provide increased focus on integrating civil rights awareness and information about increasing diversity of student populations and equitable access in all professional development events sponsored or conducted by the CCTE unit.

Professional Development: As an illustration of CCTE’s approach to equity, DESE has sponsored workshops for districts and postsecondary institutions relative to climate, including gender, gender identity, and sexual orientation in career and technical education. The emphasis of the workshops and the individual technical assistance provided is to assist educators involved in secondary and postsecondary education in creating and supporting positive environment where students are not limited to traditional gender roles. With the understanding that gender does not need to limit career choices and equipped with resources to improve the climate around sexual orientation, educators can more effectively support students in making career decisions that are not limited by gender, sexual orientation, gender identity or perceived sexual orientation. At the request of the CCTE unit, participating institutions sent teams to these workshops, moving toward the goal that districts view school climate and student achievement as a whole school initiative. Workshop evaluations were overwhelmingly positive, and the CCTE unit will continue this unique initiative. This initiative will be especially useful for schools newly implementing HQCCP pathways.

Engaging Stakeholders in Professional Development: Under Perkins V, CCTE will engage stakeholders in the design of professional development and technical assistance in support of equity and access. For example, district staff have expressed interest in professional development about how to design supports and accommodations for students with disabilities, or how to identify resources to support English Learners in a CTE curriculum. Strategies may be specific to each program of study and career area (such as multi-lingual resources available for specific programs of study) and may draw on the expertise of various stakeholders, such as advocacy groups and parent groups.

Research and Data: CCTE utilizes data on an ongoing basis in data review and the cycle of inquiry.

-coordinate with the State board to support the local development of career pathways and articulate processes by which career pathways will be developed by local workforce development boards, as appropriate;

Innovation Pathways, through the collaboration of local education agencies, workforce development boards (MassHire boards), and representatives from business/industry, "promote the development, implementation, and adoption of programs of study or career pathways aligned with State-identified high-skill, high-wage, or in-demand occupations or industries." (See page 24 of the redline.) The five industry sectors that are allowable pursuant to the IP designation will ensure students are learning about viable careers that sync with Massachusetts' workforce needs.

State-approved vocational technical education programs partner with local business and industry professionals and local workforce development boards to support pathway development aligned to in-demand occupations identified in Massachusetts. Through the continuous review and evaluation of
technical programs and curricula, high-skill, rigorous programs of study are implemented to secondary and postsecondary technical education students.

vi. **support effective and meaningful collaboration between secondary schools, postsecondary institutions, and employers to provide students with experience in, and understanding of, all aspects of an industry, which may include work-based learning such as internships, mentorships, simulated work environments, and other hands-on or inquiry-based learning activities; and**

Massachusetts state-approved vocational technical education programs offer instruction for grades 9-14, secondary to postsecondary, and all state-approved programs are required to implement the applicable vocational technical education framework for the applicable program. As discussed earlier, Massachusetts has eleven clusters, which organizes 44 vocational technical education frameworks. The frameworks are directly aligned to all aspects of industry identified by six strands as follows;

- **Strand 1**: Safety and Health Knowledge and Skills
- **Strand 2**: Technical Knowledge and Skills (Industry Specific)
- **Strand 3**: Embedded Academic Knowledge and Skills
- **Strand 4**: Employability and Career Readiness Knowledge and Skills
- **Strand 5**: Management and Entrepreneurship Knowledge and Skills
- **Strand 6**: Technological Knowledge and Skills

Each strand identifies specific standards and objectives, grouped under Topic Headings that identify the competencies and skills learned through hands-on applied learning. Each standard is followed by a performance example.

Many vocational technical education programs are linked to off-site work-based learning opportunities, which go beyond the simulated “shop” environment and consist of off-site construction projects and on-site clinical rotations at local hospitals and direct care facilities.

Massachusetts currently has three state apprenticeship agreements and 14 statewide articulation agreements that enables students enrolled in secondary state-approved Chapter 74 vocational programs to transfer credit earned during high school to a state community college or to the apprenticeship program.

vii. **improve outcomes and reduce performance gaps for CTE concentrators, including those who are members of special populations. (Section 122(d)(4)(C) of Perkins V)**

**DESE-Wide Strategies:** Through ESSA, Massachusetts is taking next steps to strengthen college and career readiness outcomes for all students and expand the use of data and information to inform families, to shape school improvement, to close achievement gaps, and support educators. Career and technical programs benefit from these strategies, particularly strategies that build linkages between secondary and postsecondary education and apprenticeships. Moreover, because so many students and families are interested in career technical education, under ESSA and Perkins V, the new performance indicators shared with the public include a measure of enrollment in career technical education.
CVTE Program Monitoring: CCTE conducts CTE program reviews and monitoring in a six-year cycle for all schools with C/VTE programs. A risk assessment results in tiered assignments for each school district, and the review process as well as technical assistance vary by tier. CCTE reviews data for potential disproportionality to inform professional development and uses disaggregated CTE enrollment data to engage Perkins recipients in discussions on both gaps in achievement and in program access.

The VTE Framework Revision Project is intertwined with CCTE monitoring through the review of program data. The Department will recommend changes to program design, implementation, and program closure or sunsetting, in cases where criteria are met, and change is warranted. This process will ensure Massachusetts clusters, the vocational frameworks and programs are aligned to the changing needs of business and industry.

Accountability activities and measures are being developed for Early College and Innovation Pathways: designations are issued for five years; performance tracking and benchmarking is critical to ensuring that programs are on track, quantitatively and qualitatively, over the course of the designation, and continued designation is contingent upon achievement of performance goals.

d. Describe how the eligible agency, if it opts to do so, will include the opportunity for secondary school students to participate in dual or concurrent enrollment programs, early college high school, or competency-based education. (Section 122(d)(4)(D) of Perkins V)

As discussed in other sections of this State Plan, the Associate Commissioner of College, Career and Technical Education and his/her staff will, during the period covered by Perkins V, coordinate career and technical education programs with other federal programs to ensure non-duplication by regular consultations with the State Directors of other federal programs within the DESE and the Community Colleges Executive Office. DESE and the Massachusetts Board of Higher Education have as a high priority the establishment of seamless education PreK-16. A critical element is student-level data sharing system available that includes student-level career and technical education data elements as described elsewhere in the Perkins V State Plan. It is also important to note that DESE has embraced career and technical education and the Associate Commissioner for College, Career and Technical Education is included in policy discussions as appropriate.

Massachusetts currently has 14 statewide articulation agreements for students enrolled in Chapter 74 vocational programs to earn articulated credit at Massachusetts Community Colleges. Work will continue to expand and enhance this initiative so students may earn transcribed credits with community college and four-year institutions.

Additionally, Massachusetts has three statewide Apprenticeship Agreements with the Carpenters Unions and this will be enhanced and expanded to more vocational program, expanding student participation and utilization of agreements through Perkin V.
See also information provide above about the state’s new Early College pathways.
e. **Describe how the eligible agency will involve parents, academic and career and technical education teachers, administrators, faculty, career guidance and academic counselors, local business (including small businesses), labor organizations, and representatives of Indian Tribes and Tribal organizations, as appropriate, in the planning, development, implementation, and evaluation of its career and technical education programs.** (Section 122(d)(12) of Perkins V)

Massachusetts will implement a notification-approval process for Perkins CTE Programs, as identified in this State Plan, similar to the process for Chapter 74 state-approved vocational technical education programs. The process will ensure equity for all students, and will insure alignment to size, scope and quality, rigorous programs of study and high quality services and supports for all.

The assessment process to determine current levels of equitable access to all components of career/vocational technical education for all students, including special populations, currently participating in CCTE in Massachusetts will include:

- the process to determine levels of access to information, schools, activities and programs, including all special populations
- Review most recent CCTE Perkins and Chapter-74 achievement gap data for all students, including special populations, and determine priority focus areas based on that data.
- Identify and provide resources, professional development, and technical assistance to districts specifically in ensuring equitable access
- Identify a method to determine high-quality programs, initiatives, activities (promising practices) currently being implemented specifically to address equal access to CCTE career/vocational technical education
- Develop methods to expand active communication with key stakeholders, both internally and externally – including parents, academic and career and technical education teachers, administrators, faculty, career guidance and academic counselors, local business (including small businesses), labor organizations, and representatives of Indian Tribes and Tribal organizations, as appropriate
- Blend/braid all efforts with overarching DESE initiatives (e.g. ensuring high quality in our state’s teaching force for the neediest populations, targeted assistance etc.).

In addition, as part of the Department’s monitoring system, CCTE reviews each eligible recipient receiving Perkins funds for the following:

- Students are reported accurately as Perkins participants under the Commonwealth’s Student Information Management System (SIMS) or, at the postsecondary level, reported appropriately as Perkin students, as provided in a Memorandum of Agreement between the colleges and the Massachusetts Department of Elementary and Secondary Education
- Schools maintain records of one-year student follow-up that verify the information districts have been reporting
- Schools use Perkins funds appropriately as specified in annual Perkins grants
• Schools use Perkins funds to supplement, not supplant, local resources
• Career guidance and placement services are provided in order to assist each student enrolled in a career/vocational technical education program in making the transition to the workforce, postsecondary education, and/or apprenticeship programs.
• MCAS and/or other academic assessment results are used to design instructional and support services. All individuals including those who are members of special populations are provided with equal access to career/vocational technical education programs, services and activities, including that programs are readily accessible to persons with disabilities.
• Representatives of business/industry; organized labor (union); colleges(s); parent(s)/guardian(s); student(s); representative(s) from registered apprenticeship programs are involved in the development, implementation, and review of career/vocational technical programs as members of Program Advisory Committees. Representation is race, linguistic, disability, and nontraditional by gender inclusive, and if not, there is a formal recruitment plan outlining the process to make it inclusive.
• Activities are provided to prepare students, including students that are members of special populations, for high skill, high wage, or in-demand occupations that will lead to self-sufficiency.
• Professional development activities, technical assistance or training to provide education professionals with the knowledge, skills and occupational information needed to assist all students, including all special student populations.
• Ensure all programs are implemented in accordance with the federal Vocational Guidelines – MOA Methods of Administration Program.

f. Include a copy of the local application template that the eligible agency will require eligible recipients to submit pursuant to section 134(b) of Perkins V – as described in Text Box 4 for the statutory requirements for local applications under section 134(b) of Perkins V.

A copy of the Local Application template is included in the Appendix.

g. Include a copy of the comprehensive local needs assessment template and/or guidelines that the eligible agency will require of eligible recipients to meet the requirements of section 134(c) of Perkins V – as discussed in Text Box 5 for the requirements for the comprehensive local needs assessment under section 134(c) of Perkins V.

A copy of the Comprehensive Local Needs Assessment template is included in the Appendix.

h. Provide the eligible agency’s definition for “size, scope, and quality” that will be used to make funds available to eligible recipients pursuant to section 135(b) of Perkins V.
Specific criteria for determining Size, Scope and Quality include the following:

Size
A Perkins program of sufficient size –
1. Has no fewer than six students in each program (or 20 students in Perkins programs combined) each year for several years, to support a community learning environment with peers, and may close if too few students are participating.

Scope
A Perkins program’s scope covers both sequence and breadth:
2. Covers all aspects of an industry (below);
3. Includes a sequence of technical courses (below) that progress from introductory exposure of all aspects of an industry to more advanced technical knowledge and skills;
4. Includes career planning;
5. Includes linkages or other coordination from secondary to postsecondary education programs and provides technical skill proficiency or a recognized postsecondary credential; and
6. Provides opportunities for students to learn and demonstrate proficiency in technical skills through competency-based and work-based, or other applied learning.

Quality
A Perkins program has these elements of quality in its design and implementation:
7. Organized educational activities that contribute to students’ higher-order reasoning and problem-solving skills with regular assessment of students’ technical knowledge and skills, to provide students opportunities to increase levels of attainment;
8. Regular evaluation using performance outcomes (including the measure of program quality) and comprehensive local needs assessment, where the results are used to make program improvements;
9. A review by its advisory group or representatives from the relevant industry, within the last two years (see note), and includes consultation on the comprehensive local needs assessment;
10. Meeting or exceeding [at 90% of] performance targets for the Perkins V Core Indicators across all population groups; and
11. Is aligned to labor market demand (for example, the Massachusetts Regional Workforce Blueprints).

In addition, the program may include these elements of quality –
12. Utilizing industry-standard equipment, technologies, software, and industry practices specific to the C/VTE program, consistent with All Aspects of Industry.
13. Integration activities delivered through academic and technical skill instruction by both academic and technical teachers.
15. A program design based on research, analysis, or evaluation (where available) and that provides evidence that the activities and services will achieve intended outcomes.
16. Meeting or exceeding national program standards, where available.
The term ‘all aspects of an industry’ means strong experience in, and comprehensive understanding of, the industry that the individual is preparing to enter. In Massachusetts, All Aspects of Industry means:

1. occupational safety and health knowledge and skills
2. technical knowledge and skills;
3. embedded academic knowledge and skills;
4. employability and career readiness knowledge and skills;
5. management and entrepreneurship knowledge and skills; and
6. technological knowledge and skills.

This includes rigorous content aligned with challenging academic standards and relevant technical knowledge and skills; recognized safety credential; and essential power standards/sections of applicable Massachusetts Vocational Technical Education Frameworks. See the Massachusetts Vocational Technical Education Frameworks and Perkins V Checklist for more.

Technical courses are those that prepare students for a specific occupation or cluster of occupations (CVTE) or to be employed in a specific industry sector (IP).

A sequence of technical courses means courses that, through prerequisites, build sequentially, from simple tasks or theories to more advanced or complex skills or requirements; are in the same occupational field (CVTE) or industry sector (IP); and at the secondary level, at least two technical courses that are each a full-year equivalent (such as 2 year-long courses; 4 half-year courses; 2 block schedule courses) or two semesters of college-level courses at a postsecondary institution; and at the postsecondary level, certificate and degree programs with at least 12 credits of technical courses.

Note: Refer to guidance on the CVTE website regarding advisory committees.

3. Meeting the Needs of Special Populations

   a. Describe the eligible agency’s program strategies for special populations, including a description of how individuals who are members of special populations—
      i. will be provided with equal access to activities assisted under this Act;
      ii. will not be discriminated against on the basis of status as a member of a special population;

There are structures in place that all Perkins programs follow. Beyond these, Chapter 74-approved programs follow additional requirements driven by the state law and regulation such as admission requirements (http://www.doe.mass.edu/cte/admissions/), and Early College and Innovation Pathway programs meeting Perkins requirements follow aspects outlined in the program designation criteria (http://www.doe.mass.edu/cc/cte/), including equitable access.

Our admissions process guidance ensures equitable access to information, recruitment activities, and how to enroll in career and technical education programs. The admissions and course selection
process guidance include the administration of a wait list process for programs oversubscribed and the process for ensuring equitable placement process.

During program reviews, staff ensure the institutions master schedule does not create barriers for students who may be members of special populations.

The program review monitoring process described above, including the MOA review process required by the Office of Civil Rights, all heavily focus on equitable access for special populations. Also as described previously, DESE is engaging in a comprehensive process to examine current regulations, policies and practices to ensure equitable access to CVTE for all special populations.

iii. will be provided with programs designed to enable individuals who are members of special populations to meet or exceed State determined levels of performance described in section 113, and prepare special populations for further learning and for high-skill, high-wage, or in-demand industry sectors or occupations;

The delivery of comprehensive wrap-around services enables all students, including students who are members of special populations to meet or exceed performance levels and pursue high-skill, high-wage, in-demand occupations.

As mentioned previously, CCTE reviews data for potential disproportionality to inform professional development and uses disaggregated CTE enrollment data to engage Perkins recipients in discussions on gaps in achievement and in program access. CCTE also conducts CTE program reviews and monitoring in a six-year cycle for all schools with C/VTE programs. In program monitoring, through interviews and report reviews, access issues may be identified, and corrective action steps are taken. In addition to these, the CCTE team, in partnership with other with other Department teams, provide professional development and technical assistance at conferences and workshops, targeted to specific population groups, such as serving students in foster care, students with housing challenges, and others. Last, in the data systems available through DESE, educators can use a range of reports to see students’ historical and most recent data for students who are newly in their district, such as students in foster care and students experiencing homelessness.

iv. will be provided with appropriate accommodations; and

Through the LOOK Act and 2018 changes in regulation, Massachusetts requires, starting on July 1, 2021, that CTE teachers who are assigned to provide sheltered English instruction to an English Learner either hold a Sheltered English Immersion (SEI) Teacher Endorsement or earn such endorsement within one year from the date of the assignment, with similar regulations for teachers serving students with disabilities. In 2018, DESE identified a cohort of teachers for a cost-free SEI endorsement course. Through professional development and program monitoring, including civil rights Methods of Administration (MOA), CCTE supports schools and community colleges in providing information on CTE programs and activities in languages of the communities served and of students enrolled in CTE programs.
Comprehensive services including implementation of FAPE requirements for students with disabilities with an Individual Education Program, and accommodations for students with 504 Plans. In addition, Massachusetts educators who are renewing an Academic Professional License must receive training equal to at least 15 professional development points for strategies for effective schooling for students with disabilities and the instruction of students with diverse learning styles. DESE is also in the process of developing comprehensive guidance for districts and families that clarifies for school personnel the practices and procedures they must follow to ensure equitable access to CVTE programs for students with Individualized Education Programs (IEPs).

v. will be provided instruction and work-based learning opportunities in integrated settings that support competitive, integrated employment. (Section 122(d)(9) of Perkins V)

As mentioned previously, CCTE reviews data for potential disproportionality to inform professional development and uses disaggregated CTE enrollment data to engage Perkins recipients in discussions on gaps in achievement and in program access. CCTE also conducts CTE program reviews and monitoring in a six-year cycle for all schools with C/VTE programs. In program monitoring, through interviews and report reviews, access issues may be identified, and corrective action steps are taken.

4. Preparing Teachers and Faculty

a. Describe how the eligible agency will support the recruitment and preparation of teachers, including special education teachers, faculty, school principals, administrators, specialized instructional support personnel, and paraprofessionals to provide career and technical education instruction, leadership, and support, including professional development that provides the knowledge and skills needed to work with and improve instruction for special populations. (Section 122(d)(6) of Perkins V)

As discussed earlier in this State Plan, Massachusetts has a long history of ensuring highly qualified career/vocational technical education teachers deliver rigorous technical programs of study. Massachusetts has two distinct licensure tracks, which provide for the preparation and attainment of academic licensure, including licensure for teachers in Perkins Career and Technical Education Programs under MGL Chapter 71 and a specific licensure route aligned to MGL Chapter 74 for Vocational Technical Education Teacher Licensure.

Both licensure tracks require the completion of teacher tests. The Department has contracted with a vendor who creates and administers the MA Vocational Technical Teacher Test for Chapter 74 vocational licensure, which includes subject matter written, and performance tests. Test Development teams work in partnership with subject matter experts to align the vocational tests to the 44 vocational technical frameworks, with a keen eye on testing requirements and vetting.

The Department continues to utilize Perkins funds to support professional development academies administered in partnerships with school districts with Perkins career and technical education programs.
and Chapter 74 state-approved vocational technical education programs by supporting statewide vocational technical education leadership academies. There are two academies that provide high quality, intensive, and focused professional development for aspiring leaders in career/vocational technical education. The intended outcome of these academies is initial Chapter 74 Vocational Administrator licensure, in accordance with Massachusetts General Law Chapter 74, for academy participants, creating a leadership pipeline in career/vocational technical education.

Perkins Leadership Academy One is designed to lead to vocational administrative licensure for Vocational Supervisor-Director, Vocational Principal/Assistant Principal, or Cooperative Education Coordinator. Perkins Leadership Academy Two is designed to lead to MGL Chapter 74 vocational licensure for Vocational Principal/Assistant Principal, or Vocational Superintendent/Assistant Superintendent.

The Department actively engages the field in professional development and technical assistance on a regular basis. Technical assistance is delivered through multiple avenues, including onsite monitoring, conferences, webinars and specific, targeted assistance.

Previously discussed, staff from CCTE now work closely with the Massachusetts School Building Authority (MSBA) and are involved in the review of proposed new buildings, including the vocational programs offered, shop layout and required equipment, to ensure the vocational technical frameworks can be implemented, and accessibility to ensure equal access for all students. This is another example of targeted assistance provided directly to institutions.

C. **Fiscal Responsibility**

1. Describe the criteria and process for how the eligible agency will approve eligible recipients for funds under this Act, including how—

   a. each eligible recipient will promote academic achievement;

The process of approving eligible recipients for funds is linked to Perkins Core Indicators, which in turn are linked to academic achievement.

Under Perkins IV, Massachusetts established a Perkins Grant Application process for both secondary and postsecondary allocation recipients. The process included the identification of Perkins Core Indicators associated with proposed expenditures, where those uses of Perkins funds would address one or more of the Perkins IV Core Indicators of performance. DESE includes as one of its Core Indicators measures of success the attainment of statewide test standards at the secondary level and will continue to do so.

To support the connection between Perkins funding and Core Indicators (including academic achievement), professional development was provided through workshops at a statewide annual conference for the CTE community. DESE has incorporated a criterion into the CTE program review process that addresses the use of Perkins IV Core Indicator Data Performance Outcomes for the
improvement of programs and student outcomes and will continue this practice in reviewing Perkins V grants.

In 2017, the review of Perkins IV allocation grants was transferred to DESE’s Resource Allocation and Strategic Planning (RASP) Office that now oversees all federal grants that come through DESE.

CCTE works closely with RASP to address the transition from Perkins IV to Perkins V. These two offices are creating a team to develop a Needs Assessment, Local Application, and Perkins V grant application as well as a review mechanism reflecting the changes in the Perkins Act, in keeping with the Perkins V priorities. The Needs Assessment, as well as the Local Application and grant form will incorporate by design, a mechanism for school districts and community colleges to identify criteria from the needs assessment based on data, linked to the local application for specific priority in the plan, which will further identify the use of Perkins V Funds. This will not only create a seamless process between the need’s assessment, local application and use of grant funds but also support high quality programs, academic and technical rigor and enhance student achievement.

As noted throughout this State Plan, recipients have many tools and approaches for promoting academic achievement throughout CTE programming, including the close integration of academic and technical skills, as shown through the VTE Curriculum Frameworks.

b. each eligible recipient will promote skill attainment, including skill attainment that leads to a recognized postsecondary credential; and

Strategies to support skill attainment are built into the entire program cycle, from program approval to reporting and data analysis to technical assistance and professional development. Under Perkins V, the funding process will continue to require commitment to technical and academic skill attainment. In the following transition year, Massachusetts will develop a Perkins V four-year plan that defines the means of measuring skill attainment. Throughout the transition from Perkins IV to Perkins V, DESE will support recipients in the work of promoting and measuring skill attainment.

Systems, tools and resources that support this work include:

VTE Curriculum Frameworks. The VTE Curriculum Frameworks include six strands that provide students with opportunities to develop technical and academic skills and to explore all aspects of the industry. These strands are:

- Strand 1: Safety and Health Knowledge and Skills
- Strand 2: Technical Skills (specific to each program)
- Strand 3: Embedded Academics (also specific to each program)
- Strand 4: Employability and Career Readiness Knowledge and Skills
- Strand 5: Management and Entrepreneurship Knowledge and Skills
- Strand 6: Technological Knowledge and Skills

CVTE programs integrate these strands into student experiences through a variety of strategies, in academic and technical classrooms, in school-based enterprises, in work-based learning experiences and in other experiences.
A Comprehensive Resource to address Industry-Recognized Credentials (coming soon). DESE is currently collaborating with the Department of Higher Education and the Executive Office of Labor and Workforce Development to develop a comprehensive resource about credentials that have value in the labor market to be able to support student awareness of those credentials, and to enhance programming designed to teach students the skills needed to attain them.

Resources to Support Postsecondary Connections. As noted above, Massachusetts is expanding opportunities for students to earn postsecondary credits while in high school, through the Early College Pathways, statewide articulation agreements, statewide apprenticeship agreements, and other initiatives, including transition support for homeless and foster care students

c. each eligible recipient will ensure the local needs assessment under section 134 takes into consideration local economic and education needs, including, where appropriate, in-demand industry sectors and occupations. (Section 122(d)(5) of Perkins V)

As noted earlier in this State Plan, Massachusetts has implemented a statewide labor market analysis system, dividing the state into seven regions, and then generating seven (7) regional blueprints that describe labor market trends, local economic and education needs, and in-demand industry sectors and occupations. All recipients of Perkins funds will be required to use this data source to identify areas of need for their region while engaging in self-analysis using DESE-developed Comprehensive Local Needs Assessment tool to identify areas in need of improvement. Allocation and competitive RFP applications will require applicants to present programs based on local needs assessment.

About the Regional Labor Market Blueprints

As noted in prior sections of this State Plan, the Regional Labor Market Blueprints are an important new statewide system for aligning education and training with state, regional and local labor market needs.

The Massachusetts Executive Office of Education, along with two other key agencies of the executive branch, the Executive Office of Labor and Workforce Development and the Executive Office of Housing and Economic Development, are collaborating closely on critical economic, labor and business needs in the state through a structure previously referred to as the Workforce Skills Cabinet. Over the past two years, the Cabinet has overseen the development of a comprehensive analysis of the labor market needs of the state to support strategic planning for education and training across the Commonwealth, among other needs. The Cabinet divided the state into seven large regions, sought teams of experts for each region drawn from all key stakeholder groups, and developed a process for those teams to create a blueprint for the region, based on all the labor market information (LMI) relevant to the region. Each region has identified its in-demand industry sectors and occupations and the regions have worked on strategic plans to address skills gap issues and supply problems affecting staffing needs, and ultimately the economic viability of businesses in the regions.
These blueprints now serve as the leading source of relevant data for decision-making about programs of study that should be developed in the state. Perkins programs, as well as other career technical education programs, such as the state-approved VTE programs funded through its Chapter 74 funding and new Innovation Pathways are now expected to be aligned with the labor market needs identified in these blueprints. All of these programs are expected to offer students education and training for the skills needed in the industry sectors or occupations identified in the blueprints.

Beyond the critical and priority industries identified in these regional blueprints, recipients can also apply to create programs, within any of the 44 frameworks or within the Innovation Pathways industries, by justifying the proposed program based on local economic needs, especially in partnership with local companies.

2. Describe how funds received by the eligible agency through the allotment made under section 111 of the Act will be distributed—

   a. among career and technical education at the secondary level, or career and technical education at the postsecondary and adult level, or both, including how such distribution will most effectively provide students with the skills needed to succeed in the workplace; and

DESE will distribute Perkins funds to secondary institutions according to the provisions of Section 131 (a), (c) and (d) under Perkins V.

DESE will distribute Perkins funds according to the provisions of Section 132 (a) and (c) of Perkins V, both of which use local census data to allocate 70% of the funds based upon students who are economically disadvantaged. This formula helps target funds to students from low-income families.

Secondary allocations must be $15,000 or higher; institutions with allocations lower than $15,000 may form a consortium, request a waiver based on geographic isolation (in a rural area), or transfer their dollars to another local education agency (LEA) which operates Perkins Programs through the grants schedule A process.

Postsecondary allocations must be $50,000 or higher; institutions with allocations lower than $50,000 may form a consortium or request a waiver based on geographic isolation (in a rural area) from the state director.

   b. among any consortia that may be formed among secondary schools and eligible institutions, and how funds will be distributed among the members of the consortia, including the rationale for such distribution and how it will most effectively provide students with the skills needed to succeed in the workplace. (Section 122(d)(8) of Perkins V)

After approving a request to form a consortium as specified in the applicable Request for Proposals, CCTE will allocate funds under section 131 of Perkins V to a consortium that will be formed among secondary schools and eligible institutions by consolidating the individual allocations of each member.
The consortium shall develop and implement a joint Perkins V Local Plan and single grant application that is subject to review and approval by CCTE. Each consortium may allocate the funds awarded to its members based on the dollar amount for required joint activities and services identified in the consortium's Local Application. Perkins V funds awarded to a consortium shall be used only for the activities and services that are mutually beneficial to members of the consortium. Funds may not be provided to individual members of the consortium (as a "pass-through") for purposes and programs benefiting one member of the consortium.

3. For the upcoming program year, provide the specific dollar allocations for each eligible recipient made available by the eligible agency for career and technical education programs and programs of study under section 131(a)-(e) of the Act and describe how these allocations are distributed to local educational agencies, areas career and technical education schools and educational service agencies within the State. (Section 131(g) of Perkins V)

Massachusetts’s allocation list for the current year for secondary (400 Grant) institutions is located here:


Additionally, the secondary allocation list is provided as an attachment uploaded to the portal.

The steps included in the secondary allocation process are as follows:
DESE obtains the district census data; calculates the state allocation; calculates the state population (sum of district’s population); calculates the baseline district allocation (percent of state); redistributes district allocation based on local relationships and agreements between local districts, academic regional districts, regional vocational school districts, and agricultural school districts.
Perkins funds are allocated to local districts based on U.S. Census data. Thirty (30%) percent of the funding allocation is based on the population aged 5-17 in the district; seventy (70%) percent is based on the population aged 5-17 in poverty in the district. This establishes the baseline allocation for the district.

The baseline allocation is redistributed to Agricultural school districts based on Perkins enrollment from sending towns. Remaining funds are then allocated to local districts, academic regional school districts and regional vocational technical schools based on Perkins enrollment; a local or academic regional school district that is a member of a regional vocational school district will retain a percentage of Perkins funds based on the percentage of Perkins students from member towns that are enrolled in Perkins programs operated by that district. The regional vocational school district is allocated funds based on the number of Perkins enrolled students from its member towns who are enrolled in the regional vocational technical school district.

Districts that receive a final allocation of less than $15,000 may establish consortia and combine funds or request a special waiver from the Associate Commissioner based on the geographic isolation of the district. A district which would qualify for more than $15,000 in Perkins funds but which has no
Perkins enrollments may allocate its Perkins funds to another school district (usually a regional vocational technical school district) that has Perkins students. Remaining funds from districts with allocations of less than $15,000 opting not to form a consortium and districts with allocations of greater than $15,000 with no Perkins enrollment and choose not to allocate to another district will be added to the secondary allocation total and redistributed to districts using the same formula process as described above.

4. For the upcoming program year, provide the specific dollar allocations for each eligible recipient made available by the eligible agency for career and technical education programs and programs of study under section 132(a) of the Act and describe how these allocations are distributed to eligible institutions and consortia of eligible institutions within the State.

Postsecondary funds are distributed according to the number of Perkins-enrolled students who are Pell Grant recipients, each institution claiming a percentage of the state total based on its percentage of the state’s total Perkins Pell grant recipients. Postsecondary allocations must be $50,000 or higher. Institutions with allocations less than $50,000 may form a consortium or request a waiver from the state director based on geographic isolation (in rural areas).

Massachusetts’s allocation list for the current year for postsecondary (401 Grant) institutions is located here:


Additionally, the postsecondary allocation list is provided as an attachment uploaded to portal.

The secondary and postsecondary allocation process is described in detail in number 3 above.

5. Describe how the eligible agency will adjust the data used to make the allocations to reflect any changes in school district boundaries that may have occurred since the population and/or enrollment data was collected, and include local education agencies without geographical boundaries, such as charter schools and secondary schools funded by the Bureau of Indian Education. (Section 131(a)(3) of Perkins V)

Not Applicable.

6. If the eligible agency will submit an application for a waiver to the secondary allocation formula described in section 131(a)—
   a. include a proposal for such an alternative formula; and
b. describe how the waiver demonstrates that a proposed alternative formula more effectively targets funds on the basis of poverty (as defined by the Office of Management and Budget and revised annually in accordance with section 673(2) of the Community Services Block Grant Act (42 U.S.C. 9902(2)) to local educational agencies with the State. (Section 131(b) of Perkins V)

Also indicate if this is a waiver request for which you received approval under the prior Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV).

No waiver request under Carl D Perkins Career and Technical Education Act of 2006 (Perkins IV).

7. **If the eligible agency will submit an application for a waiver to the postsecondary allocation formula described in section 132(a)—**
   a. include a proposal for such an alternative formula; and
   b. describe how the formula does not result in a distribution of funds to the eligible institutions or consortia with the State that have the highest numbers of economically disadvantaged individuals and that an alternative formula will result in such a distribution. (Section 132(b) of Perkins V)

Also indicate if this is a waiver request for which you received approval under the prior Carl D. Perkins Career and Technical Education Act of 2006 (Perkins IV).

No waiver request under Carl D Perkins Career and Technical Education Act of 2006 (Perkins IV).

If the eligible agency will award reserve funds to eligible recipients under section 112(c) of Perkins V, describe the process and criteria for awarding those funds.

DESE will award reserve funds to eligible recipients under section 112(c) of Perkins V. The process and criteria for awarding those funds will occur through the issuance of Requests for Proposals (RFP’s) to:

[1.] better integrate career planning from the middle school through the high school level;
[2.] Improve and expand integration of career pathways among Innovation Career Pathways, Career/Vocational Technical Education programs, and
[3.] Increase the fluidity of the transition between programs that cover a broad range of career options (Innovation Career Pathways) and career concentration programs (C/VTE and Career Technical Education (Perkins-only) programs.

There are also plans to strengthen the career pathway link between secondary and postsecondary institutions. All RFP’s will be competitive and will encourage partnerships between LEA’s, postsecondary institutions, and other parties as appropriate.
8. Provide the State's fiscal effort per student, or aggregate expenditures for the State, that will establish the baseline for the Secretary’s annual determination on whether the State has maintained its fiscal effort, and indicate whether the baseline is a continuing level or new level. If the baseline is new, please provide the fiscal effort per student, or aggregate expenditures for the State, for the preceding fiscal year. (Section 211(b)(1)(D) of Perkins V)

The Maintenance of Effort (MOE) for FY19 is $688,418. The MOE will be met by DESE and the Department of Corrections’ staff salaries (including fringe benefit costs) who are funded on state appropriations. The baseline is a continuing level.

D. Accountability for Results

1. Identify and include at least one (1) of the following indicators of career and technical education program quality—

   a. the percentage of CTE concentrators (as defined in Text Box 6 for the statutory definition of a CTE concentrator under section 3(12) of Perkins V) graduating from high school having attained a recognized postsecondary credential;

   b. the percentage of CTE concentrators graduating high school having attained postsecondary credits in relevant career and technical education programs and programs of study earned through a dual or concurrent enrollment program or another credit transfer agreement; and/or

   c. the percentage of CTE concentrators graduating from high school having participated in work-based learning. (Section 113(b)(2)(A)(iv)(I) of Perkins V)

Massachusetts will use the third accountability indicator of program quality, the number and percentage of CTE concentrators graduating from high school having participated in work-based learning. Many Massachusetts students participate in a range of high-quality work-based learning opportunities currently, and this is expected to grow with an increased focus on program quality. The Massachusetts indicator of program quality reflects the range of high-quality programmatic and geographic options available to students across the state. The state proposes to define this metric as completion of any of the following: a pre-apprenticeship, cooperative education, internship, or capstone project; participation in a simulated work experience within a M.G.L. Chapter74-approved program; or, as these reflect sustained interactions with industry or community professionals in a real workplace setting and/or a simulated work environment, the successful completion of a high-value industry-recognized credential issued by a recognized private organization and/or other State, or federal government department, agency, or board.

The range of work-based learning experiences are explained in more detail:
• **A Pre-Apprenticeship** is a program or set of services designed to prepare individuals to enter and succeed in a Registered Apprenticeship program. A pre-apprenticeship program, by definition, has a documented partnership with at least one Registered Apprenticeship program.

• **An Internship** is a paid or unpaid work-based 100 hour or more learning experience in a workplace in which structured learning occurs related to the student’s program of study.

• **A Capstone** is a well-designed process for identification of individual or team student project that ensures an alignment with the industry sector of at least one hundred hours of activity by the student outside of the classroom, in the form of research, service learning, or other related activity, that supports the capstone project.

• **A Simulated Work Experience** refers to participation in Chapter 74-approved vocational technical education programs; these are programs that meet the definition of vocational technical education contained in Massachusetts General Law Chapter 74 and are approved by the Department of Elementary and Secondary Education pursuant to Chapter 74 and the Vocational Technical Education Regulations.

• **Completion of High-Value Industry Recognized Credentials** refer to students who successfully complete a credential that is sought or accepted by employers within an industry or sector as a recognized, preferred, or required credential for recruitment, screening, hiring, retention, or advancement purposes, and where appropriate, is endorsed by a recognized trade association or organization representing a significant part of the industry or sector. The successful completion of these credentials reflect that students have engaged in sustained interactions with industry or community professionals in a real workplace setting and/or a simulated work environment that foster in-depth, firsthand engagement with the tasks required in a given career field. The Department, in partnership with the Massachusetts Workforce Skills Cabinet, will determine which credentials are of high value and in high demand in the Commonwealth.

• **Cooperative Education:** Cooperative education is a program of vocational technical education for persons who, through a cooperative arrangement between the school and employers, receive instruction, including required academic courses and related vocational technical instruction, by the alternation of study in school with a job in any occupational field. Such instruction shall be planned and supervised by the school and the employer so that each contributes to the student's education and employability. Work periods and school attendance may be on alternate half-days, full days, weeks or other coordinated periods of time. “Editor’s Note: Cooperative education is always paid as inherent in the definition’s use of the term “employer.”

  o **Cooperative Education per M.G.L.c.149, Section 1 (MA Child Labor Laws)**
  o “Co-operative courses”, courses approved as such by the Department of Elementary and Secondary Education and conducted in public schools or any approved vocational school where technical or related instruction is given in conjunction with practical experience by employment in co-operating factories, manufacturing, mechanical or mercantile establishments or workshops or other co-operating employments.

  o **Cooperative Education per The Code of Federal Regulations Title 29 (CFR 29) Part 570.50 (c) (1) (2)** defines student learners:
o The student-learner is enrolled in a course of study and training in a cooperative vocational training program under a recognized State or local educational authority or in a course of study in a substantially similar program conducted by a private school and;

o Such student-learner is employed under a written agreement, which provides:
  - That the work of the student-learner in the occupations declared particularly hazardous shall be incidental to his/her training;
  - That such work shall be intermittent and for short periods of time, and under the direct and close supervision of a qualified and experienced person;
  - That safety instructions shall be given by the school and correlated by the employer with on-the-job training; and
  - That a schedule of organized and progressive work processes to be performed on the job shall have been prepared. Each such written agreement shall contain the name of student-learner and shall be signed by the employer and the school coordinator or principal. Copies of each agreement shall be kept on file by both the school and the employer.

Include any other measure(s) of student success in career and technical education that are statewide, valid, and reliable, and comparable across the State. (Section 113(b)(2)(A)(iv)(II) of Perkins V) Please note that inclusion of “other” program quality measure(s) is optional for States.

Not Applicable.

Provide the eligible agency’s measurement definition with a numerator and denominator for each of the quality indicator(s) the eligible agency selects to use.

The numerator is the number and percentage of Perkins concentrators graduating from high school having completed any of the following: a pre-apprenticeship, cooperative education, internship, or capstone project; participated in a simulated work experience within a M.G.L. Chapter 74 state-approved program; or earned a high-value industry-recognized credential issued by a recognized private organization and/or other State, or federal government department, agency, or board, reflecting completion of a work-based learning experience.

The denominator is the number of Perkins concentrators graduating from high school in a given year.

2. Provide on the form in Section V.B, for each year covered by the State plan beginning in FY 2020, State determined performance levels or each of the secondary and postsecondary core indicators, with the levels of performance being the same for all CTE concentrators in the State. (Section 113(b)(3)(A)(i)(I) of Perkins V)

3. Describe the procedure the eligible agency adopted for determining State determined levels of performance described in section 113 of Perkins V, which at a minimum shall include—
a. a description of the process for public comment under section 113(b)(3)(B) of Perkins V as part of the development of the State determined levels of performance (as outlined in Text Box 7 for the statutory requirements for consultation on State determined performance levels under section 113(b)(3)(B) of Perkins V);

DESE established the measurement definitions and approaches for core indicators contained within this Perkins V State Plan, for students in career and technical education at the secondary and postsecondary levels, in consultation with stakeholders. The Perkins V High Quality College & Career Pathways Stakeholder Group as described elsewhere in the Perkins V State Plan and other constituent groups were consulted in development of the measurement definitions and approaches contained in this plan. After this consultation and review was completed, the Perkins V State Plan was released for public comment and public hearings were conducted, as described elsewhere this Perkins V State Plan.

b. an explanation for the State determined levels of performance that meet each of the statutory requirements in Text Box 8; and

Massachusetts has analyzed numerous existing data sources, including prior years secondary and postsecondary core indicators of performance, disaggregated by special populations, programs, enrollments, and various academic and technical program of study variables, to determine objective, quantifiable measures to support continuous improvement. Massachusetts strives for continuous improvement of all students, including all special populations enrolled in career and technical education programs. Reviewing data trends and gaps through data disaggregation is one approach utilized in determining State levels of performance. Another was a review of existing CTE concentrators actual performance as a measure for proposing targets higher than the actual performance achieved. Through the public comment period, diverse stakeholders had numerous opportunities to provide input regarding proposed State levels of performance.

However, Massachusetts cannot fully project some of the core indicators levels as the state is in flux, moving to a “Next Generation MCAS state test”, so no true baseline exists, and therefore Massachusetts requests “unanticipated circumstances” for some secondary and postsecondary core indicators of performance.

c. a description of how the State determined levels of performance set by the eligible agency align with the levels, goals and objectives other Federal and State laws, (Section 122(d)(10) of Perkins V).

As part of the procedures for determining State determined levels of performance, describe the process that will be used to establish a baseline for those levels.

DESE will use the Massachusetts academic assessments (i.e., Massachusetts Comprehensive Assessment System (MCAS)) tests in English language arts, mathematics and science implemented under ESSA to measure career and technical education students’ attainment of English language arts, mathematics and science knowledge and skills.
DESE will use the Massachusetts student graduation rates implemented under ESSA for core indicator 1S. DESE will align the secondary core indicators under Perkins V with the program outcomes implemented under the Massachusetts Vocational Technical Education Regulations Section 4.05 to the greatest extent possible, and with the ESSA outcomes.

DESE will align the postsecondary core indicators under Perkins V with the program outcomes implemented by the Massachusetts Board of Higher Education to the greatest extent possible by consulting with stakeholders and the Massachusetts Board of Higher Education. The baseline data that are available are included in the tables below; the indicators for which DESE uses MCAS and graduation rates are adopted under ESSA.

DESE provides baseline data for the most recently completed program year as feasible on the performance of students enrolled in career and technical education programs on each of the core indicators.

4. Provide a written response to the comments regarding State determined performance levels received during the public comment period pursuant to section 113(b)(3)(B) of Perkins V. (Section 113(b)(3)(B)(iii) of Perkins V).

No public comments received regarding State determined performance levels.

As part of the written response, include a description of any the changes made to the State determined performance levels as a result of stakeholder feedback.

Not applicable. No public comments received regarding State determined performance levels.

5. Describe how the eligible agency will address disparities or gaps in performance as described in section 113(b)(3)(C)(ii)(II) of Perkins V in each of the plan years, and if no meaningful progress has been achieved prior to the third program year, a description of the additional actions the eligible agency will take to eliminate these disparities or gaps. (Section 122(d)(11) of Perkins V)

As part of the written response, and pursuant to the Report of the Senate Committee on Health, Education, Labor, and Pensions (HELP), the eligible agency could indicate that it will analyze data on the core indicators of performance to identify gaps in performance, explain how they will use evidence-based research to develop a plan to provide support and technical assistance to eligible recipients to address and close such gaps, and how they will implement this plan. The eligible agency is not required to submit a new State plan prior to the third program year in order to address this requirement.
DESE will annually evaluate the effectiveness of career and technical education programs by analyzing Perkins V Core Indicator data.

The Associate Commissioner of College, Career and Technical Education and his/her staff will, during the period covered by Perkins V, coordinate career and technical education programs with other federal programs to ensure non-duplication by regular consultations with the State Directors of other federal programs within the DESE and the Community Colleges Executive Office. DESE and the Massachusetts Board of Higher Education have as a high priority the establishment of seamless education PreK-16. A critical element is student-level data sharing system available that includes student-level career and technical education data elements as described elsewhere in the Perkins V State Plan. It is also important to note that DESE has embraced career and technical education and the Associate Commissioner for College, Career and Technical Education is included in policy discussions as appropriate.

In addition to reporting CVTE outcomes and disaggregating to support gap analysis, DESE provides resources and experiences on cycle of inquiry and evidence-based research which help educators build analysis skill and use, build and share evidence about practices. These resources are online (http://www.doe.mass.edu/cte/data/ and http://www.doe.mass.edu/research/) , shared through webinars, professional development and technical assistance experiences, and provide schools opportunities to draw conclusions, identify causes and take action based on identified trends.
III. ASSURANCES, CERTIFICATIONS, AND OTHER FORMS

A. Statutory Assurances

X The eligible agency assures that:

1. It made the State plan publicly available for public comment for a period of not less than 30 days, by electronic means and in an easily accessible format, prior to submission to the Secretary for approval and such public comments were taken into account in the development of this State plan. (Section 122(a)(4) of Perkins V)

2. It will use the funds to promote preparation for high-skill, high-wage, or in-demand industry sectors or occupations and non-traditional fields, as identified by the State. (Section 122(d)(13)(C) of Perkins V)

3. It will provide local educational agencies, area career and technical education schools, and eligible institutions in the State with technical assistance, including technical assistance on how to close gaps in student participation and performance in career and technical education programs. (Section 122(d)(13)(E) of Perkins V)

4. It will comply with the requirements of this Act and the provisions of the State plan, including the provision of a financial audit of funds received under this Act, which may be included as part of an audit of other Federal or State programs. (Section 122(d)(13)(A) of Perkins V)

5. None of the funds expended under this Act will be used to acquire equipment (including computer software) in any instance in which such acquisition results in a direct financial benefit to any organization representing the interests of the acquiring entity or the employees of the acquiring entity, or any affiliate of such an organization. (Section 122(d)(13)(B) of Perkins V)

6. It will use the funds provided under this Act to implement career and technical education programs and programs of study for individuals in State correctional institutions, including juvenile justice facilities. (Section 122 (d)(13)(D) of Perkins V)

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7 An eligible agency that submits a 1-Year Transition Plan in FY 2019 is not required to hold a public comment period on the 1-Year Transition Plan. Such agency must assure that it meets this public comment requirement prior to submitting its Perkins V State Plan in FY 2020.
B. **EDGAR Certifications**

By submitting a Perkins V State Plan, consistent with 34 CFR 76.104, the eligible agency certifies that:

1. It is eligible to submit the Perkins State plan.
2. It has authority under State law to perform the functions of the State under the Perkins program(s).
3. It legally may carry out each provision of the plan.
4. All provisions of the plan are consistent with State law.
5. A State officer, specified by title in Item C on the Cover Page, has authority under State law to receive, hold, and disburse Federal funds made available under the plan.
6. The State officer who submits the plan, specified by title in Item C on the Cover Page, has authority to submit the plan.
7. The entity has adopted or otherwise formally approved the plan.
8. The plan is the basis for State operation and administration of the Perkins program.

C. **Other Forms**

The eligible agency certifies and assures compliance with the following enclosed forms:

1. Assurances for Non-Construction Programs (SF 424B) Form (OMB Control No. 0348-0040) - [https://www2.ed.gov/fund/grant/apply/appforms/sf424b.pdf](https://www2.ed.gov/fund/grant/apply/appforms/sf424b.pdf)
2. Disclosure of Lobbying Activities (SF LLL) (OMB Control No. 4040-0013): [https://apply07.grants.gov/apply/forms/sample/SFLLL_1_2-V1.2.pdf](https://apply07.grants.gov/apply/forms/sample/SFLLL_1_2-V1.2.pdf)
IV. BUDGET

A. Instructions

1. On the form in Item IV.B below, provide a budget for the upcoming fiscal year. As you prepare your budget, refer to the statutory descriptions and assurances in Section II.C and Section III.A, respectively, of this guide.

2. In completing the budget form, provide--

   Line 1: The total amount of funds allocated to the eligible agency under section 112(a) of Perkins V. This amount should correspond to the amount of funds noted in the Department’s program memorandum with estimated State allocations for the fiscal year.

   Line 2: The amount of funds made available to carry out the administration of the State plan under section 112(a)(3). The percent should equal not more than 5 percent of the funds allocated to the eligible agency as noted on Line 1, or $250,000, whichever is greater.

   Line 3: The amount of funds made available to carry out State leadership activities under section 112(a)(2) of Perkins V. The percent should equal not more than 10 percent of the funds allocated to the eligible agency as noted on Line 1.

   Line 4: The percent and amount of funds made available to serve individuals in State institutions, such as: (a) correctional institutions; (b) juvenile justice facilities; and (c) educational institutions that serve individuals with disabilities pursuant to section 112(a)(2)(A) of Perkins V. The percent of funds should equal not more than 2 percent of the funds allocated to the eligible agency as noted on Line 1.

   Line 5: The amount of funds to be made available for services that prepare individuals for non-traditional fields pursuant to section 112(a)(2)(B) of Perkins V. The amount of funds should be not less than $60,000 and not more than $150,000.

   Line 6: The amount of funds to be made available for the recruitment of special populations to enroll in career and technical education programs pursuant to section 112 (a)(2)(C) of Perkins V. The percent of funds shall not be less than the lesser of an amount equal to 0.1 percent of the funds made available by the eligible agency for State leadership activities as noted on Line 3, or $50,000.

   Line 7: The percent and amount of funds to be made available to eligible recipients [local education agencies (secondary recipients) and institutions of higher education (postsecondary recipients)] pursuant to section 112(a)(1) of Perkins V. The
percent of funds should be not less than 85 percent of the funds allocated to the eligible agency as noted on Line 1.

Line 8: The percent and amount, if any, of funds to be reserved and made available to eligible recipients under section 112(c) of Perkins V. The percent of funds should be not more than 15 percent of the 85 percent of funds noted on Line 7.

Line 9: The percent and amount, if any, of funds to be reserved and made available to secondary recipients under section 112(c) of Perkins V.

Line 10: The percentage and amount, if any, of funds to be reserved and made available to postsecondary recipients under section 112(c) of Perkins V.

Line 11: The percent and amount of funds to be made available to eligible recipients under section 112(a)(1) of Perkins V. The percent and amount of funds should represent the funds remaining after subtracting any reserve as noted on Line 8.

Line 12: The percent and amount of funds to be distributed to secondary recipients under the allocation formula described in section 131 of Perkins V.

Line 13: The percent and amount of funds to be distributed to postsecondary recipients under the allocation formula described in section 132 of Perkins V.

Line 14: The amount of funds to be made available for the State administration match requirement under section 112(b) of Perkins. The amount of funds shall be provided from non-Federal sources and on a dollar-for-dollar basis.
B: Budget Form

State Name: Massachusetts
Fiscal Year FY2021:

<table>
<thead>
<tr>
<th>Line Number</th>
<th>Budget Item</th>
<th>Percent of Funds</th>
<th>Amount of Funds</th>
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</thead>
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<td>Total Perkins V Allocation</td>
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<td>State Administration</td>
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<td>3</td>
<td>State Leadership</td>
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<td>4</td>
<td>• Individuals in State Institutions</td>
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<tr>
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<td>– Correctional Institutions</td>
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<td>4b</td>
<td>– Juvenile Justice Facilities</td>
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<td>$0</td>
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<tr>
<td>4c</td>
<td>– Institutions that Serve Individuals with Disabilities</td>
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<td>$0</td>
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<td>5</td>
<td>• Non-traditional Training and Employment</td>
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<td>• Special Populations Recruitment</td>
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<td>7</td>
<td>Local Formula Distribution</td>
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<td>8</td>
<td>• Reserve</td>
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<td>$1,600,000</td>
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<td>9</td>
<td>– Secondary Recipients</td>
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<td>– Postsecondary Recipients</td>
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<td>– Secondary Recipients</td>
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<tr>
<td>13</td>
<td>– Postsecondary Recipients</td>
<td>27.3%</td>
<td>$4,503,104</td>
</tr>
<tr>
<td>14</td>
<td>State Match (from non-federal funds)</td>
<td>Not applicable</td>
<td>$707,000</td>
</tr>
</tbody>
</table>
V. STATE DETERMINED PERFORMANCE LEVELS

A. Instructions

1. On the form in Item V.B, provide State determined performance levels (SDPLs), covering FY 2020-23, for each of the secondary and postsecondary core indicators of performance for all CTE concentrators in the State described in section 113(b) of Perkins V (see Table 6). In preparing your SDPLs, refer to your narrative descriptions in Section II.D of this guide.

2. In completing the SDPL form, provide—

   Column 2: Baseline level
   Columns 3-6: State determined levels of performance for each year covered by the State plan, beginning for FY 2020, expressed in percentage or numeric form and that meets the requirements of section 113(b)(3)(A)(III) of Perkins V. See Text Box 8 for the statutory requirements for setting State determined levels of performance under section 113(b)(3)(A)(iii) of Perkins V.

3. Revise, as applicable, the State determined levels of performance for any of the core indicators of performance—

   i. Prior to the third program year covered by the State plan for the subsequent program years covered by the State plan pursuant to section 113(b)(3)(A)(ii); and/or
   ii. Should unanticipated circumstances arise in a State or changes occur related to improvement in data or measurement approaches pursuant to section 113(b)(3)(A)(iii).

Please note that, pursuant to section 123(a)(5) of Perkins V, an eligible agency may not adjust performance levels for any core indicators that are subject to, and while executing, an improvement plan pursuant to section 123(a) of Perkins V.
Table 6: Section 113(b) Core Indicators of Performance

<table>
<thead>
<tr>
<th>Indicator Descriptions</th>
<th>Indicator Codes</th>
<th>Indicator Names</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Secondary Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The percentage of CTE concentrators who graduate high school, as measured by the four-year adjusted cohort graduation rate (defined in section 8101 of the Elementary and Secondary Education Act of 1965).</td>
<td>1S1</td>
<td>Four-Year Graduation Rate</td>
</tr>
<tr>
<td>(At the State’s discretion) The percentage of CTE concentrators who graduate high school, as measured by extended-year adjusted cohort graduation rate defined in such section 8101.</td>
<td>1S2</td>
<td>Extended Graduation Rate</td>
</tr>
<tr>
<td>CTE concentrator proficiency in the challenging State academic standards adopted by the State under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, as measured by the academic assessments in reading/language arts as described in section 1111(b)(2) of such Act.</td>
<td>2S1</td>
<td>Academic Proficiency in Reading/Language Arts</td>
</tr>
<tr>
<td>CTE concentrator proficiency in the challenging State academic standards adopted by the State under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, as measured by the academic assessments in mathematics as described in section 1111(b)(2) of such Act.</td>
<td>2S2</td>
<td>Academic Proficiency in Mathematics</td>
</tr>
<tr>
<td>CTE concentrator proficiency in the challenging State academic standards adopted by the State under section 1111(b)(1) of the Elementary and Secondary Education Act of 1965, as measured by the academic assessments in science as described in section 1111(b)(2) of such Act.</td>
<td>2S3</td>
<td>Academic Proficiency in Science</td>
</tr>
<tr>
<td>The percentage of CTE concentrators who, in the second quarter after exiting from secondary education, are in postsecondary education or advanced training, military service or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a)), or are employed.</td>
<td>3S1</td>
<td>Post-Program Placement</td>
</tr>
</tbody>
</table>


### Table 6: Section 113(b) Core Indicators of Performance (continued)

<table>
<thead>
<tr>
<th>Indicator Descriptions</th>
<th>Indicator Codes</th>
<th>Indicator Names</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Secondary Level (continued)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The percentage of CTE concentrators in career and technical education programs and programs of study that lead to non-traditional fields.(^8)</td>
<td>4S1</td>
<td>Non-traditional Program Concentration</td>
</tr>
<tr>
<td><em>The eligible agency must include at least one program quality indicator—5S1, 5S2, or 5S3—and may include any other quality measure(s) that are statewide, valid, reliable, and comparable across the State.</em></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The percentage of CTE concentrators graduating from high school having attained a recognized postsecondary credential.</td>
<td>5S1 (Not applicable)</td>
<td>Program Quality – Attained Recognized Postsecondary Credential</td>
</tr>
<tr>
<td>The percentage of CTE concentrators graduating from high school having attained postsecondary credits in the relevant career and technical education program or program of study earned through a dual or concurrent enrollment or another credit transfer agreement</td>
<td>5S2 (Not applicable)</td>
<td>Program Quality – Attained Postsecondary Credits</td>
</tr>
<tr>
<td>The percentage of CTE concentrators graduating from high school having participated in work-based learning.</td>
<td>5S3</td>
<td>Program Quality – Participated in Work-Based Learning</td>
</tr>
<tr>
<td>Other(s) (optional): The percentage of CTE concentrators achieving on any other measure of student success in career and technical education that is statewide, valid, and reliable, and comparable across the State. Please identify.</td>
<td>5S4, 5S5, 5S6 (Not applicable)</td>
<td>Program Quality – Other</td>
</tr>
</tbody>
</table>

\(^8\) This means that a student gets counted under this indicator if individuals from their gender comprise less than 25 percent of the individuals employed in the related occupation or field of work.
Table 6: Section 113(b) Core Indicators of Performance (continued)

<table>
<thead>
<tr>
<th>Indicator Descriptions</th>
<th>Indicator Codes</th>
<th>Indicator Names</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Postsecondary Level</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The percentage of CTE concentrators who, during the second quarter after program completion, remain enrolled in postsecondary education, are in advanced training, military service, or a service program that receives assistance under title I of the National and Community Service Act of 1990 (42 U.S.C. 12511 et seq.), are volunteers as described in section 5(a) of the Peace Corps Act (22 U.S.C. 2504(a)), or are placed or retained in employment.</td>
<td>1P1</td>
<td>Post-Program Placement</td>
</tr>
<tr>
<td>The percentage of CTE concentrators who receive a recognized postsecondary credential during participation in or within 1 year of program completion.</td>
<td>2P1</td>
<td>Earned Recognized Postsecondary Credential</td>
</tr>
<tr>
<td>The percentage of CTE concentrators in career and technical education programs and programs of study that lead to non-traditional fields.</td>
<td>3P1</td>
<td>Non-traditional Program Concentration</td>
</tr>
</tbody>
</table>

* This means that a student gets counted under this indicator whether the student obtains the credential during participation or within 1 year of completion. The Department interprets “within 1 year of completion” to have the plain meaning of those words: that the student would be counted if the student obtains the credential in the 1 year following that student’s completion of the program.

** This means that a student gets counted under this indicator if individuals from their gender comprise less than 25 percent of the individuals employed in the related occupation or field of work.
### B: State Determined Performance Levels (SDPL) Form

State Name: Massachusetts

<table>
<thead>
<tr>
<th>Indicators</th>
<th>Column 1</th>
<th>Column 2</th>
<th>Column 3</th>
<th>Column 4</th>
<th>Column 5</th>
<th>Column 6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Baseline Level</strong></td>
<td><strong>Performance Levels</strong></td>
<td>FY 2020</td>
<td>FY 2021</td>
<td>FY 2022</td>
<td>FY 2023</td>
</tr>
<tr>
<td><strong>Secondary Indicators</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1S1: Four-Year Graduation Rate</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>94.68</td>
<td>87.90</td>
<td>88.00</td>
<td>89.00</td>
<td>90.00</td>
<td></td>
</tr>
<tr>
<td>1S2: Extended Graduation Rate</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>2S1: Academic Proficiency in Reading Language Arts</td>
<td>51.45</td>
<td>46.30</td>
<td>47.00</td>
<td>48.00</td>
<td>49.00</td>
<td></td>
</tr>
<tr>
<td>2S2: Academic Proficiency in Mathematics</td>
<td>47.42</td>
<td>42.70</td>
<td>43.00</td>
<td>43.50</td>
<td>44.00</td>
<td></td>
</tr>
<tr>
<td>2S3: Academic Proficiency in Science</td>
<td>70.62</td>
<td>63.60</td>
<td>64.00</td>
<td>64.50</td>
<td>65.00</td>
<td></td>
</tr>
<tr>
<td>3S1: Post-Program Placement</td>
<td>97.89</td>
<td>79.29</td>
<td>80.00</td>
<td>81.00</td>
<td>82.00</td>
<td></td>
</tr>
<tr>
<td>4S1: Non-traditional Program Concentration</td>
<td>22.90</td>
<td>16.40</td>
<td>17.00</td>
<td>17.50</td>
<td>18.00</td>
<td></td>
</tr>
<tr>
<td>5S1: Program Quality – Attained Recognized Postsecondary Credential</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>5S2: Program Quality – Attained Postsecondary Credits</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
<tr>
<td>5S3: Program Quality – Participated in WorkBased Learning</td>
<td>83.86</td>
<td>75.00</td>
<td>75.50</td>
<td>76.00</td>
<td>76.50</td>
<td></td>
</tr>
<tr>
<td>5S4: Program Quality – Other(^{11})</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td></td>
</tr>
</tbody>
</table>

\(^{11}\) The Perkins V State Plan Portal will allow an eligible agency to include on this form as many “other” program quality indicators as they choose.
<table>
<thead>
<tr>
<th>Indicators</th>
<th>Baseline Level</th>
<th>FY 2020</th>
<th>FY 2021</th>
<th>FY 2022</th>
<th>FY 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>Postsecondary Indicators</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1P1: Post-Program Placement</td>
<td>n/a</td>
<td>71.00</td>
<td>71.10</td>
<td>71.15</td>
<td>71.20</td>
</tr>
<tr>
<td>2P1: Earned Recognized Postsecondary Credential</td>
<td>53.04</td>
<td>53.00</td>
<td>53.05</td>
<td>53.10</td>
<td>53.15</td>
</tr>
<tr>
<td>3P1: Non-traditional Program Concentration</td>
<td>22.10</td>
<td>22.00</td>
<td>22.10</td>
<td>22.15</td>
<td>22.16</td>
</tr>
</tbody>
</table>

*Provide any additional information regarding SDPLs, as necessary:*

Massachusetts is requesting *Unanticipated Circumstances* for the following Core Indicators of performance:

2S1 Academic Attainment English Language Arts: Baseline reflects first year of transition to ELA Next Generation MCAS.

2S2 Academic Attainment Math: Baseline reflects first year of transition to Math Next Generation MCAS.

2S3 Academic Attainment Science: Utilized highest science technology and engineering MCAS score. However, the baseline will shift with the transition to Next Generation Science MCAS.

1P1 Postsecondary Retention & Placement: This is a new measure with no established baseline.
Table of Public Comments

Feedback, requests and recommendations made at the public hearings, and accompanying actions or responses, are summarized below.

<table>
<thead>
<tr>
<th>topic</th>
<th>public comment</th>
<th>Action/Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comprehensive Local Needs Assessment</td>
<td>The CLNA questions are very thorough, almost to the points of being so extensive that it would require a research team dedicated to answer all of the questions. Might there be a template for institutions to follow in conducting a CLNA within the constraints of administering the Perkins award? Within the 5% allowable portion of the grant for administration, is assessment factored in?</td>
<td>clarified in Comprehensive Local Needs Assessment</td>
</tr>
<tr>
<td>Size, Scope and Quality</td>
<td>I can interpret the following in a few ways: &quot;six students in a program or 20 students in total, each year for several years&quot;. I believe that people will get confused about what distinction is being made between the minimums being presented in this sentence: 6 and/or 20. I asked for a clarification during one of the informational sessions. However, I would still value having clear, written guidance to refer to.</td>
<td>clarified in Size, Scope and Quality document</td>
</tr>
<tr>
<td>Size, Scope and Quality</td>
<td>Perkins programs are considered those that have 12 or more credits in technical courses. For programs where the 12 credits include some nontechnical courses - ex. college-level English - is it still considered a Perkins program, if not all of those courses in the program are technical in nature?</td>
<td>no additional actions</td>
</tr>
<tr>
<td>Other</td>
<td>One requirement of Perkins V is to provide funding that helps specific special populations. I was curious how - what's the expectation of collecting data to inform the spending when we are not allowed to collect data for some of these populations? That's first question.</td>
<td>will be clarified in data collection guidance</td>
</tr>
<tr>
<td>Other</td>
<td>Is it a requirement for postsecondary education [institutions] receiving Perkins funding to spend some of funding on grade 5-8 or is that only a requirement for secondary institutions?</td>
<td>will be clarified in application guidance</td>
</tr>
<tr>
<td>Other</td>
<td>I have shared my feedback via the HQCCP meetings</td>
<td>no additional actions</td>
</tr>
<tr>
<td>Middle School Career Awareness</td>
<td>we are excited to see your plans to include career awareness in middle schools as a focus for the statewide Connecting Activities initiative; to extend the College and Career Advising Framework and MyCAP (My Career and Academic Plan) to middle school grades; and to issue Perkins V RFPs that emphasize better integration of career planning from the middle school through the high school level.</td>
<td>No additional actions</td>
</tr>
</tbody>
</table>

1 To conform with contemporary usage, this advisory uses the term “equitable access” to express the concept of “equal access” found in federal and state law.
Appendix Items (uploaded to State Plan Portal)

Comprehensive Local Needs Assessment Document
Local Application Workbook
Secondary (400 Grant) FY20 Allocation List
Postsecondary (401 Grant) FY20 Allocation List